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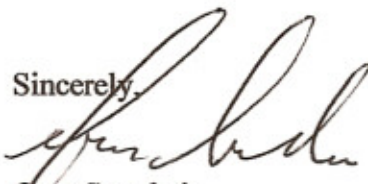
Modified Work Plan Explanation

On August 3, 2005, a Subsurface Investigation Work Plan was submitted to Humboldt County Department of Health and Human Services: Division of Environmental Health (HCDEH). This Work Plan had been prepared in response to HCDEH letter of July 14, 2003, with the scope of work being based upon SounPacific's evaluation of the project and extensive conversations with HCDEH personnel. The primary scope of work was the delineation of the soil and groundwater contamination at the site. In addition, the scope of work included conducting a sensitive receptor survey—due to the downgradient presence of suspected wetlands and residential properties that are believed to have water wells and to a lesser degree the evaluation of the soil and groundwater in the vicinity of the product lines and dispensers. The original scope of work included a total of 22-borings of which 12 had the sole purpose to delineate the extent of the soil and groundwater contamination at the site. The remaining borings were also to be used in the delineation process, but were also aimed at investigating possible new source areas of the contamination associated with the current UST's product lines and dispensers. The Work Plan was conditionally approved in a letter dated August 22, 2005.

The original scope of work had been approved by HCDEH, but upon further discussion with HCDEH and the UST Clean-Up Fund and prior to conducting the field work, it was decided to modify the scope of work by relocating and eliminating some of the borings. As a result, the attached Scope of Work has been prepared to document these modifications.

As you are aware, to ensure that this project moves towards remedial action, the work outlined in this scope of work has been conducted. The results of which will be submitted to your office in due course.

Sincerely,



Greg Sounhein



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Subsurface Investigation

Scope of Work

Dated:

February 2006

Site:

**Bigfoot Gas
2801 Central Avenue
McKinleyville, California 95519**

LOP # 12365

Prepared for:

Big Oil & Tire Co.

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1.0 EXECUTIVE SUMMARY

On behalf of Big Oil & Tire Co. (BO&T), the current property owner, and the July 14, 2003 letter from the Humboldt County Department of Health and Human Services: Division of Environmental Health (HCDEH), SounPacific Environmental Services (SounPacific) prepared a *Subsurface Investigation Workplan (Workplan)* to further delineate the soil and groundwater contamination at the Bigfoot Gas site, located at 2801 Central Avenue, McKinleyville, California. This Scope of Work document replaces the previous conditionally approved August 3, 2005 Work Plan, and was prepared following conversations with HCDEH and UST Cleanup Fund, immediately prior to the implementation of the field work. A summary of the work is outlined below.

- SounPacific is conducting an on-site and off-site subsurface investigation at the Bigfoot Gas site to further delineate the lateral and vertical extent of soil and groundwater contamination at the Site. Soil and groundwater samples are collected and analyzed from eleven on-site borings. In addition, four (4) off-site borings are to be drilled, from which only groundwater samples will be collected and analyzed. The data collected will be used to assist with the delineation of the contamination and the placement of new groundwater monitoring wells. All collected samples will be analyzed for TPHg, TPHd, TPHmo, BTXE, and fuel oxygenates including MTBE. In addition, all groundwater samples are to be analyzed for lead scavengers.
- A sensitive receptor survey will be conducted within a 1,000-foot radius of the site to locate all domestic and/or industrial wells and surface water bodies.

2.0 INTRODUCTION

This document presents the *Scope of Work* for the BO&T Bigfoot Gas UST site in McKinleyville, California. A *Work Plan* was developed per the letter dated July 14, 2003, from the Humboldt County Department of Health and Human Services: Division of Environmental Health (HCDEH), which concurred with the recommendation to prepare a work plan to identify

the source(s) of soil contamination and further delineate the extent of groundwater contamination at the site. The Work Plan had been approved by HCDEH, however, further discussion with HCDEH and the UST Clean-Up Fund, immediately prior to conducting the field work, it was decided to modify the scope of work by relocating and eliminating some of the borings. As a result, this Scope of Work document was prepared to document these modifications. Hence, this document replaces the August 3, 2005 Work Plan that was initially prepared for this Site

2.1 Scope of Work

The scope of work required for a subsurface investigation is outlined in the "Tri-Regional Board Staff Guidelines for Evaluation and Investigation of Underground Storage Tanks." The investigation as outlined in this document is to define and delineate the lateral and vertical extent of the hydrocarbon contamination that was released from the UST system and product lines at Bigfoot Gas facility. In addition, the objective of the work is to also show the impact that the release has had on the soil and groundwater. The goal of this subsurface investigation is aimed at determining the following issues:

- Lateral and vertical extent of soil and groundwater contamination
- The need and location of future of down gradient monitoring wells
- The need for Remedial Actions

Based on our review of North Coast Regional Water Quality Control Board (NCRWQCB) and HCDEH files, we understand that the minimum scope of work at this stage in the project is to attempt the following goals:

- Identification and verification the Hydrocarbon plume by:
 - Sampling of soil using EPA Method 5035 and analysis using EPA Methods 8260 and 8015.
 - Analysis of groundwater using EPA Methods 8260 and 8015.
- Completion of a Report of Findings report that discusses the investigation including recommendations for further investigations.
- Conducting a sensitive receptor survey within a 1,000-foot radius of the site.

2.2 Site Location

The site is located in McKinleyville, California, with a physical street address of 2801 Central Avenue, McKinleyville, California 95519. The station is positioned on the northeast corner of the intersection of Murray Road and Central Avenue (Figure 1).

2.3 Site Description

The site is used as a retail fueling service station, that is owns and operated by BO&T, who is the responsible party. Site improvements include a single story building with an attached, overhead awning that covers the main dispenser islands. The main structure is approximately 800 square feet and is positioned near the center of the property with the entrance facing west towards Central Avenue. Attached to the main structure is a small out building at the north end of the property that is used for storage (Figure 2). The area directly west and south of the structure is used as the service station forecourt and is paved with asphalt and concrete. The remaining areas of the site, east of the structure and north of the forecourt area is not developed and unpaved

Two (2) 12,000-gallon split compartmented USTs, located in a single excavation in the southwest portion of the forecourt, between the station and Central Avenue, and are used for the storage of three (3) grades of unleaded gasoline and diesel fuel. Fuel is dispensed from two (2) main dispenser islands located under the awning in the northern portion of the forecourt (Figure 2). The site is serviced by public utilities. Surface water is controlled by drainage ditches and storm drains.

2.4 Vicinity Description

The surrounding land use is residential and commercial. An automobile garage is located immediately to the south across Murray Road and properties adjacent to the east, west and north are undeveloped (Figure 3).

2.5 Hydrogeologic Setting

The site is approximately two (2) miles east of the Pacific Ocean and approximately 110 feet above mean sea level (MSL). The site is situated approximately 600 feet south of Norton Creek and 1,400 feet north of Widow White Creek. According to the United States Geological Survey Arcata North Quadrangle California-Humboldt County, 7.5 minute series (Topographic) 1959 (photo-revised 1972), a tributary of Norton Creek is re-routed into an underground culvert along the south side of the site. Norton Creek is also artificially controlled along the eastern side of Central Avenue near the site. These two engineered drainage features intersect near the southwestern corner of the property and flow west, toward the Pacific Ocean (Figure 2). It is uncertain if the engineered drainage along the southern and western boundaries of the site will exhibit any hydraulic influence on groundwater flow directly beneath the site. Topography consists of rolling terrain that gently slopes west toward the Pacific Ocean (Figure 3). The groundwater-monitoring program determined that the groundwater levels varied from one (1) foot to 5.5 feet below ground surface (bgs) (Table 1, Chart 1) and flows in a westerly to northwesterly direction (Figure 4).

This site is located on an uplifted marine terrace, which has informally been named the Savage Creek Terrace (Carver & Burke, 1992). This marine terrace generally consists of non- to poorly-indurated shallow marine sands, with minor silt, clay, and gravel. This marine terrace is relatively flat, moderately incised by surface drainages (small creeks & streams), exhibits some warping, and gently slopes towards the Pacific Ocean (Figure 3). These sediments were deposited on wave-cut benches, which have since been exposed by tectonic uplift and changes in sea level. Marine terrace deposits typically range in thickness up to a few tens of feet and are late Pleistocene in age. Soil development on these marine terraces has broken down minerals within the sands and near the ground surface there is an increased concentration of clays as a result.

2.6 Current Site Usage & UST History

SounPacific understands that the property is currently owned by BO&T of Arcata, California. The main structure is currently used as a retail gas station for the retail dispensing of three (3) grades of gasoline and diesel fuel from USTs on site. On the north section of the property, a commercial propane tank is stored and used for the filling of smaller propane tanks for the public (Figure 2).

Minimal information is available prior to the installation of the two (2) 12,000-gallon USTs that were installed in May of 1991 by Beacom Construction (Beacom). The two (2) 12,000-gallon USTs were installed in the southwestern part of the property (Figure 5). On July 11, 1991, Beacom removed one (1) 2,000-gallon gasoline UST and one (1) 1,000-gallon kerosene UST from separate excavations, that had previously been used (Figure 5).

3.0 PREVIOUS INVESTIGATIONS

Previous studies by Clearwater Group, Inc. (CGI) and SounPacific indicated the following historical information:

3.1 1991 Installation of (2) 12,000-gallon Gasoline USTs

In May of 1991 two, 12,000-gallon USTs were installed in the southwest portion of the Site. Prior to installation, three (3) groundwater samples (TP-1, TP-2, and TP-3) were collected from test pits dug at the site of the USTs (Figure 5). The samples were analyzed for TPHg, BTXE, and TPH as solvent (TPHs), however, no contaminants were reported (Table 2). In June of 1991, Beacom staff collected six (6) soil samples (W-1, W-2, E-1, E-2, E-3, and S-1) from beneath the product lines (Figure 5) that were analyzed for TPHg and BTXE. Laboratory analysis of the samples, reported TPHg at levels between 1.6 parts per million (ppm) to 210 ppm, with low BTXE concentrations (Table 3).

3.2 1991 Removal of Former Gasoline and Kerosene USTs

In July 1991, the premium gasoline and kerosene USTs at the site were removed. Following the removal of the gasoline UST, two (2) soil samples (PN and PS) and one (1) groundwater sample (Premium) were collected from the excavation that had contained the 2,000-gallon gasoline UST. In addition, two (2) soil samples (S-1 and S-3) were collected from beneath the product lines (Figure 5). All samples were analyzed for TPHg and BTXE. Laboratory analysis reported TPHg and BTEX in all the samples, with concentrations up to 5,000 ppm TPHg in the soil and 320,000 ppb in the groundwater (Tables 2-3). Two (2) soil samples (KE and KW) and one (1) groundwater sample (Kerosene) were also collected from the 1,000-gallon kerosene UST removal excavation (Figure 5). These samples were analyzed for TPH Solvent (TPHs). Laboratory analysis reported no TPHs in the soil; however, 1,500 ppb TPHs was reported in the groundwater, (Tables 2 and 3).

3.3 1995 CGI Investigation

In November 1995, CGI drilled and collected soil samples from five (5) boring locations (B-1, SB-1, SB-2, SB-3, and SB-4) near the site of the former gasoline UST near (Figure 5). These samples were analyzed for TPHg, BTXE, TPHd, TPHs, and lead (Table 3). TPHg and BTEX was reported in four (4) of the nine (9) samples, with a maximum concentration of TPHg of 5,600 ppm

3.4 2000 SounPacific Investigation

On September 20, 2000, SounPacific collected soil samples from nine (9) boring locations (B-1, B-2, B-3, B-5, B-6, B-7, B-8, B-9, and B-10) (Figure 5). All soil samples were analyzed for TPHg, BTXE, and MTBE; in addition, a soil sample from boring B-5 was also analyzed for TPHd (Table 3). Laboratory analysis reported either low or non-detect levels of TPHg in a majority of the samples, however, a sample from boring B10 did report TPHg at 1,400 ppm. Also on September 20, 2000, SounPacific collected groundwater samples from eight (8) of the

nine boring locations (B-1, B-2, B-3, B-6, B-7, B-8, B-9, and B-10) were collected (Figure 5). Groundwater samples were analyzed for TPHg, BTXE, MTBE; six (6) fuel oxygenates, and dissolved lead. Laboratory analysis of the samples reported TPHg and BTEX in three of the samples; however, MTBE was present in six of the samples (Table 2).

3.5 2002 SounPacific Investigation

Further subsurface investigation was conducted at the Bigfoot Gas site during April 2002, in accordance with the approved SounPacific *Subsurface Investigation Workplan*, dated April 10, 2001. The work consisted of drilling seven (7) borings (B-11, B-13, B-14, B-15, B-16, B-17, and B-18) for the collection of soil and grab groundwater samples and the installation of six (6) groundwater monitoring wells (Figure 5). Deviations from the Workplan included the relocating of proposed borings, PB-16 and PB-18 and the conversion of proposed boring PB-12 into monitoring well MW-6 after receiving written approval from HCDEH. All samples were analyzed for TPHg, BTXE, MTBE, and four (4) fuel-oxygenates (Tables 2 and 3). In addition, groundwater samples were also analyzed for TPHd and TPHmo. Laboratory analysis did not report any significant contamination in any of the soil samples, and elevated petroleum hydrocarbon concentrations (TPHg at 27,300 ppb) in the groundwater were limited to boring B-11 on the western margin of the site.

3.6 2002-2005 Groundwater Monitoring Program

A quarterly groundwater-monitoring program was implemented on May 1, 2002, and is continuing at the present time. The program consists of recording monthly water level data (Table 1) and collecting quarterly groundwater samples for laboratory analysis (Table 4). Water level data is used to input into a hydro-geologic modeling program that uses an inverse distance algorithm to generate groundwater elevation contour figures in order to track the direction of groundwater flow. Quarterly sampling events monitor hydrocarbon contamination levels in the groundwater beneath the site. Recent groundwater monitoring has reported petroleum hydrocarbons in wells MW-2, MW-3, MW-4, and MW-5, with the highest TPHg concentration

in well MW-5. During the most recent monitoring events, no TPHg has been reported in wells MW-1 or MW-6; however, MTBE has consistently been present in all wells.

4.0 SOIL AND GROUNDWATER CONTAMINATION ASSESSMENT

Due to the depth to groundwater (historically less than five feet bgs, commonly less than three feet bgs) at the site, the soil's vadose zone at the site is limited. Previous investigations have only identified soil contamination at three sampling locations, these included sample S-3 beneath the old product piping on the west side of the facility building; in boring SB-1 adjacent to the former premium gasoline UST; and in boring B-10, adjacent to the dispensers. The distribution of these sampling locations indicates a number of actual historical sources of the contamination. To evaluate these historical sources that are likely contributing to the dissolved phase hydrocarbon plume, and to assess the vertical and horizontal extent of soil contamination located at Bigfoot Gas, SounPacific are drilling and sampling 11 on site soil borings (PB-19, PB-21 through PB-23, PB-25, PB-27 through PB-30, PB-33 and PB-34), located on site in the vicinity of facility's product lines, the dispensers, and adjacent to the former and existing USTs. The borings are installed using a truck-mounted direct-push Geoprobe® drill-rig. The boring locations are shown on the proposed investigation map (Figure 6). The results retrieved from these samples are be used in an attempt to define the extent of the known soil contamination and locate any additional area(s) of contamination, as requested by HCDEH.

The hydrogeologic investigation consists of collecting groundwater samples from all the 11 on-site borings (Figure 6) to allow the modeling of the dissolved phase hydrocarbon plume. Also, four (4) off-site borings (PB-37 through PB-40) are to be drilled for the collection of groundwater samples to assist with the delineation of the identified groundwater contamination and the future placement of additional groundwater monitoring wells. It should be noted that borings PB-37 through PB-40 are located on a public right-of-way, and require special permitting and traffic control. In addition to defining the extent of the groundwater contamination, groundwater samples will be collected from proposed boring PB-19 to investigate the extreme levels of TPHd contamination that was detected previously in boring B-17, and from

boring PB-21 to evaluate the source of the groundwater contamination reported in previous borings B-14 and B-15.

The rational and objective for each borings, see Figure 6, is presented below. The final location of the each boring will be determined, after the boring locations have been surveyed.

Borings PB-19

- Boring PB-19 is located at the northern extent of the property, in the vicinity of previous boring B-17. Boring B-17 reported significantly elevated levels of TPHd in the groundwater, however, no known source of this contamination is known in the immediate vicinity. The purpose of this boring will be investigation the presence of a source and to re-evaluate the groundwater in this area, and to determine if further work in this area is required. The boring is drilled to a total depth of 12 feet bgs.

Borings PB-21 through PB-23

Borings PB-21 through PB-23 will be drilled in the vicinity of the former gasoline UST and its dispenser lines. Soil and groundwater samples will be collected from each boring for field screening and possible laboratory analysis.

- Boring PB-21 is located south of the former gasoline UST. The purpose of this proposed boring is to step-out and further delineate the soil and groundwater contamination that had previously been identified in this area. The boring is drilled to a total depth of 12 feet bgs.
- Boring PB-22 is located adjacent the former gasoline UST product lines. The purpose of this proposed boring is to further delineate soil and/or groundwater in this area. In addition, the purpose of the boring is to evaluate the vertical distribution of any contamination, particularly MTBE. To assess the distribution of any contamination, the boring is drilled to a depth of 30 feet bgs.

- Boring PB-23 is positioned to the east of the former gasoline UST. The purpose of this proposed boring is to further evaluate the contamination previously identified in boring B-14. The boring is drilled to a total depth of eight (8) feet bgs.

Borings PB-25 and PH-29 through PB-30

Borings PB-25 and PH-29 through PB-30 are drilled in the vicinity of the dispensers and product lines. Soil and groundwater samples will be collected from each boring for field screening and laboratory analysis, to assess in the delineation of the contamination previously identified in the vicinity of the dispensers.

- Boring PB-25 is located along the trait of the product lines and south of the East Dispenser Island. This boring will further evaluate soil contamination previously reported in this area, and conduct the initial evaluation of groundwater in this area. The boring is drilled to a total depth of 12 feet bgs.
- Borings B-27 and B-28 are located at the northern extent of the fuel dispenser islands. Laboratory analysis of soil and groundwater samples from these borings will evaluate the northern extent of the contamination associated with the dispensers. In addition, boring B-27, will assess the inconsistencies noted from boring B-18, between field observations and laboratory analytical results. Both borings are drilled to a total depth of 12 feet bgs.
- Boring B-29 is located east of the East Dispenser Island, and south of previous boring B-10 that reported elevated TPHg levels in the groundwater. The boring will further delineate the groundwater contamination identified in boring B-10, and assess the contamination in the dispenser area. The boring is drilled to a total depth of 12 feet bgs.
- Boring B-30 is located adjacent to and to the west of the West Dispenser Island. This boring will evaluate contamination is in the area, which is downgradient of both dispensers and monitoring well MW-2, which has consistently reported the presence of

groundwater contamination. In addition, the purpose of the boring is to evaluate the vertical distribution of any contamination, particularly MTBE. To assess the distribution of any contamination, the boring is drilled to a depth of 30 feet bgs.

Borings PB-33 and PH-34

Borings PB-33 and PH-34 are drilled in the vicinity of the new gasoline USTs and its product lines. Soil and groundwater samples will be collected from each boring for field screening and laboratory analysis, to determine the distribution and western migration of the contamination.

- Boring B-33 is located to the north of the new gasoline USTs. The boring will assist in the delineation of the groundwater contamination identified in borings B-7 and B-11 to the south. The boring is drilled to a total depth of 12 feet bgs.
- Boring B-34 is located to the east of the new gasoline USTs. The boring will assist in the evaluation of contaminants west of existing monitoring well MW-4. This boring was not completed due to the presence of previously unknown product lines.

Borings PB-37 through PH-40

Groundwater contamination has been reported in the borings located on the Sites western boundary with Central Avenue. Borings PB-37 through PH-40 are located on the west side of Central Avenue, across from the Site, with the objective of evaluating the western migration of the groundwater contamination. Only groundwater samples will be collected from these borings for field screening and laboratory analysis.

- Borings B-38 and B-40 are located directly west of the new gasoline USTs and the southern end of the dispenser islands, respectively. The objective of these borings is to determine if impacted groundwater has migrated beneath Central Avenue. Laboratory analysis of groundwater samples from these borings will evaluate the western extent of the contamination. Both borings are drilled to a total depth of 12 feet bgs.

- Borings B-37 and B-39 are located directly west of the Site's southern property line and the new gasoline USTs, respectively. The objective of these borings is to determine if impacted groundwater has migrated beneath Central Avenue and evaluate the western extent of the contamination. In addition, the purpose of the boring is to evaluate the vertical distribution of any contamination, particularly MTBE. To assess the distribution of any contamination, the boring is drilled to a depth of 24 feet bgs.

4.1 Direct-Push Sampling Method

Drilling is conducted by a State-Licensed driller using continuous core direct-push technology with a truck mounted hydraulic drill rig. Soil samples are collected at a minimum of every four feet, lithologic changes, areas of obvious contamination, and just above groundwater for laboratory analysis. Soil samples are be visually inspected in the field, described, and screened for organic vapors by the project geologist who reports lithologic documentation of soil condition and classifies the soil using Unified Soil Classification System guidelines. The samples are labeled, stored in appropriate sample containers, placed in coolers with ice, and kept at temperatures at or below 4° C for transportation under chain-of-custody to a State certified laboratory for analysis. All drilling and sample tailings are contained in sealed D.O.T. 17E/17H 55-gallon drums and stored on site for disposal.

4.1.1 Soil Analytical Method

All soil samples will be collected following the EPA guidelines for **SW 846 Method 5035** and analyzed for BTXE, five fuel-oxygenates by **EPA Method 8260b**, and for TPHg, TPHd, and TPHmo by **EPA Method 8015**.

4.2 Groundwater Sampling Method from Boreholes

Groundwater samples will be collected from 14 of the 15 boreholes (PB-19, PB-21 through PB-23, PB-25, PB-27 through PB-30, PB-33, PB-34, and PB37 through PB-40). No samples were

collected from boring PB-34. Samples are collected from temporary well point that are installed for water level measurements and sample collection. The temporary well points are installed by placing a small diameter PVC screened well casing into the previously drilled soil boring. Following the collection of the groundwater samples, the temporary well casings are removed and the boreholes are grouted in accordance to industry standards.

4.2.1 Groundwater Analytical Methods

All collected groundwater samples are analyzed for BTXE, five fuel-oxygenates, and lead scavengers by **EPA Method 8260b**, and for TPHg, TPHd, and TPHmo by **EPA Method 8015**.

5.0 SENSITIVE RECEPTOR SURVEY

A sensitive receptor survey will be conducted within a 1,000-foot radius from the site. The survey will consist of file review at HCDEH, property owner information from Parcel Quest software, and a door-to-door survey of property owners in order to assess the locations of all domestic and/or industrial wells within the survey area. In addition, utility corridors will be located, and the positions of wetlands and surface water bodies will be determined by physical analysis of the surface topography. A report, including a map describing the survey results and an evaluation of possible conduits for contaminant transport, will be submitted following the survey.

6.0 SITE CONCEPTUAL MODEL

In June 1991, shallow soil samples were collected adjacent to the dispensers and product lines of the Bigfoot gasoline UST system. A total of six soil samples were collected, of which all reported the presence of petroleum hydrocarbons, with the highest concentrations (130 ppm and 210 ppm) being reported adjacent to the East Dispenser Island. The following month (July 1991), the 1,000-gallon kerosene UST and 2,000-gallon gasoline UST system were removed from the Site. Analysis of soil samples from the kerosene UST excavation did not identify any contamination; however, soil samples collected from the sidewalls of the former gasoline UST

pit and beneath the product piping reported detectable levels of TPHg contamination (Table 3, Figure 5). The highest concentration was reported from the beneath the product lines adjacent to the west side of the site's main building

In November 1995, Clearwater drilled two (2) soil borings near the former gasoline UST and two (2) soil borings near the former kerosene UST, that were removed in 1991 (Figure 5). Borings SB-3 and SB-4 were drilled at the site of the former kerosene UST excavation cavity. At the kerosene tank, no contaminants were detected in the soil samples collected from either boring. At the site of the gasoline UST, boring SB-2 reported low levels of contamination, which were likely residual left behind in the soil surrounding the UST excavation. However, TPHg concentrations in boring SB-1 ranged from 2,200 ppm at a depth of 5.5' to 5,600 ppm at a depth of 3' (Table 3, Figure 7). Since the TPHg concentrations detected in SB-1 were much higher than that of soil samples taken from the excavation walls, it is unlikely that this contamination was from residuals in the soil surrounding the former gasoline UST. Therefore, it is suspected that a release from the product line near boring SB-1 constitutes the contamination source and needs to be further investigated. No groundwater samples were taken during this investigation.

During the 2000 SounPacific investigation, hydrocarbon contamination was detected in borings B-5 and B-10 in the soil at 0.5 feet bgs (Table 3, Figure 7). TPHd was the most concentrated constituent detected in boring B-5, which is inconsistent with contamination throughout the rest of the site. SounPacific was unable to procure samples below 0.5 feet bgs due to hand auger refusal. SounPacific has been unable to determine the source of this contamination with the available data. TPHg contamination in boring B-10 might possibly be due to a release from the product line or dispenser near the soil / cement interface, supported by analytical data from monitoring well MW-2 (Table 4). Contamination at this depth strongly suggests that the source may be a release from the dispensers. This would constitute another primary source and needs to be further investigated. During the same investigation, significant groundwater contamination was reported in boring B-7 and B-10. The source of the contamination in B-10 is discussed above, however, the source in B-7, is not clear, although it may have migrated from the product line adjacent to the building where contamination had previously been identified.

The 2002 SounPacific investigation, did not detect any significant soil contamination, with only low levels being reported in borings B-11 and SB-14 (Table 3, Figure 7). However, significant levels of TPHg were reported in water samples from three borings, particularly B-11, which on the western margin of the Site, and would likely be the result of the westerly migration of the groundwater. In addition, the source of the contamination identified at location B-14 is unclear, but could be due to an older release associated with the historical tanks that were reportedly located at the south east corner of the property, although no information on these tanks is known. An exceptionally high concentration of TPHd was detected in the groundwater from boring B-17 (Table 2, Figure 5), the source of which is unknown. Also, boring logs from the 2002 investigation stated that free product was floating on top of the groundwater in boreholes B-17 and B-18. SounPacific suggests that a laboratory error was made or sample integrity was compromised prior to the analysis of the groundwater sample collected from boring B-18 based on the lab reporting non-detectable results for all constituents tested in this particular sample. Therefore, SounPacific proposes further investigation in the area of borings B-16, B-17, and B-18 as is necessary for conclusions to be made. Proposed borings PB-19 and PB-27 will assist in resolving this discrepancy as well as to further delineate contamination in the form of both TPHd and TPHg.

The distribution of the contamination would indicate multiple releases from the UST system. At the current time there is not adequate data to determine where all the contamination originated from or the full extent of the groundwater plume. The shallow depth to groundwater, which results in the former UST and piping being primarily below the surface of the groundwater, along with surface water infiltrating the soil and transported contaminants into groundwater, have contributed to the dissolved hydrocarbon plume. Within the saturated zone, contaminants are transported via preferential pathways and the nature flow of the groundwater. Based on groundwater gradient measurements and sampling and analysis activities, collected by SounPacific, between May 2002 and May 2005, these contaminants have migrated to the west and northwest (Table 1, Figure 4), and has been identified at the site's western property boundary.

Primarily due to the shallow depth top groundwater, the extent of the soil contamination at the Site appears to be confined to areas around possible releases, i.e. the product lines, and at depths above four (4) feet bgs. This would indicate the product lines and dispensers are the primary source of the contamination with the piping trenches acting as preferential pathways. The residual soil contamination is found at depths that correlate with groundwater elevations throughout the year, which are generally measured between two (2) feet to four (4) feet bgs. Since the residual soil contamination is in contact with the groundwater surface, the soil contamination is leached into the groundwater and is migrating to the west with the groundwater flow direction.

7.0 SITE SANITATION PROCEDURES

All drill cutting and groundwater extracted from wells and boreholes are stored on site in D.O.T. 17E/17H 55-gallon drums. Laboratory analyses are used to establish proper disposal procedures for all cuttings and purge/development waters. Rinsate generated from steam cleaning drilling, development, and sampling equipment is contained in a portable washbasin and pumped into 55-gallon drums for storage before disposal.

8.0 PROPOSED TIME SCHEDULE

This amended Scope of Work was prepared following discussions with HCDEH and the USTCF, as the field work was about to commence. The schedule for the work at Bigfoot Gas facility is as follows:

- Original Work Plan submitted August 3, 2005, and conditionally approved by HCDEH on August 22, 2005
- The implementation of the field work presented in the original Work Plan and this document commence February 6, 2006.
- Laboratory analytical results are due by March 10, 2006.
- Report of Findings will be prepared and submitted to the HCDEH. The report include formal tables, figures, boring logs and recommendations for further activities, if deemed necessary, by mid April 2006.

If there is a deviation from the proposed schedule, all concerned parties will be notified at least five days before the proposed initiation. Formal laboratory results are expected four weeks after submitting samples. The report of findings will encompass the field investigation, present findings, and recommendations regarding future activities at the site. In addition, all GeoTracker information will be submitted.

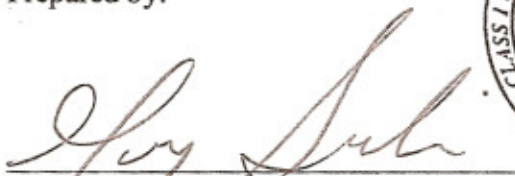
9.0 CERTIFICATION

This report was prepared under the direct supervision of a California registered geologist at SounPacific. All information provided in this report including statements, conclusions and recommendations are based solely on field observations and analyses performed by a State-certified laboratory. SounPacific is not responsible for laboratory errors.

SounPacific promises to perform all its work in a manner used by members in similar professions working in the same geographic area. SounPacific will do whatever is reasonable to ensure that data collection is accurate. Please note however, that rain, buried utilities, and other factors can influence groundwater depths, directions and other factors beyond what SounPacific could reasonably determine.

SounPacific

Prepared by:



Greg Sounhein, REA # 07994

Project Manager



Reviewed by:



Michael Sellens, RG # 4714, REA # 2890

Principal Geologist



Tables & Chart

Table 1
Water Levels
 Bigfoot Gas
 2801 Central Avenue
 McKinleyville, California 95519

| Sample Location | Date | Depth to Bottom/ Feet BGS | Survey Height/ Feet Above MSL | Depth to Water/ Feet BGS | Adjusted Elevation/ Feet Above MSL |
|-----------------|-----------|------------------------------|-------------------------------------|-----------------------------|--|
| MW-1 | 5/1/2002 | 11.66 | 111.57 | 1.54 | 110.03 |
| | 5/30/2002 | 11.67 | 111.57 | 2.43 | 109.14 |
| | 7/3/2002 | 11.63 | 111.57 | 2.65 | 108.92 |
| | 8/3/2002 | 11.62 | 111.57 | 3.40 | 108.17 |
| | 9/4/2002 | 11.64 | 111.57 | 3.90 | 107.67 |
| | 10/4/2002 | 11.70 | 111.57 | 4.25 | 107.32 |
| | 11/4/2002 | 11.65 | 111.57 | 4.36 | 107.21 |
| | 12/2/2002 | 12.63 | 111.57 | 3.61 | 107.96 |
| | 1/6/2003 | 11.66 | 111.57 | 1.22 | 110.35 |
| | 2/5/2003 | 11.67 | 111.57 | 1.31 | 110.26 |
| | 3/7/2003 | 11.67 | 111.57 | 1.67 | 109.90 |
| | 4/8/2003 | 11.67 | 111.57 | 1.00 | 110.57 |
| | 5/12/2003 | 11.67 | 111.57 | 1.32 | 110.25 |
| | 8/2/2003 | 11.88 | 111.57 | 3.11 | 108.46 |
| | 11/8/2003 | 11.88 | 111.57 | 2.57 | 109.00 |
| | 2/5/2004 | 11.88 | 111.57 | 1.21 | 110.36 |
| | 5/4/2004 | 11.88 | 111.57 | 2.03 | 109.54 |
| | 8/9/2004 | 11.82 | 111.57 | 3.71 | 107.86 |
| | 11/5/2004 | 11.83 | 111.57 | 2.08 | 109.49 |
| | 2/6/2005 | 11.83 | 111.57 | 1.65 | 109.92 |
| | 5/13/2005 | 11.81 | 111.57 | 1.32 | 110.25 |
| MW-2 | 5/1/2002 | 12.00 | 113.03 | 2.75 | 110.28 |
| | 5/30/2002 | 11.85 | 113.03 | 3.63 | 109.40 |
| | 7/3/2002 | 11.87 | 113.03 | 4.20 | 108.83 |
| | 8/3/2002 | 11.87 | 113.03 | 4.68 | 108.35 |
| | 9/4/2002 | 11.87 | 113.03 | 5.22 | 107.81 |
| | 10/4/2002 | 9.71 | 113.03 | 5.64 | 107.39 |
| | 11/4/2002 | 11.82 | 113.03 | 5.67 | 107.36 |
| | 12/2/2002 | 11.83 | 113.03 | 4.83 | 108.20 |
| | 1/6/2003 | 11.86 | 113.03 | 2.46 | 110.57 |
| | 2/5/2003 | 10.22 | 113.03 | 2.52 | 110.51 |
| | 3/7/2003 | 11.72 | 113.03 | 2.71 | 110.32 |
| | 4/8/2003 | 11.72 | 113.03 | 2.22 | 110.81 |
| | 5/12/2003 | 11.72 | 113.03 | 2.53 | 110.50 |
| | 8/2/2003 | 11.98 | 113.03 | 4.31 | 108.72 |
| | 11/8/2003 | 11.98 | 113.03 | 3.95 | 109.08 |
| | 2/5/2004 | 11.98 | 113.03 | 2.44 | 110.59 |
| | 5/4/2004 | 11.98 | 113.03 | 3.24 | 109.79 |
| | 8/9/2004 | 11.97 | 113.03 | 5.07 | 107.96 |
| | 11/5/2004 | 12.04 | 113.03 | 3.26 | 109.77 |
| | 2/6/2005 | 12.04 | 113.03 | 2.79 | 110.24 |
| | 5/13/2005 | 9.12 | 113.03 | 2.57 | 110.46 |

Table 1 (cont.)
Water Levels
 Bigfoot Gas
 2801 Central Avenue
 McKinleyville, California 95519

| Sample Location | Date | Depth to Bottom/ Feet BGS | Survey Height/ Feet Above MSL | Depth to Water/ Feet BGS | Adjusted Elevation/ Feet Above MSL |
|-----------------|-----------|------------------------------|-------------------------------------|-----------------------------|--|
| MW-3 | 5/1/2002 | 11.39 | 112.13 | 2.15 | 109.98 |
| | 5/30/2002 | 11.24 | 112.13 | 2.94 | 109.19 |
| | 7/3/2002 | 11.25 | 112.13 | 3.41 | 108.72 |
| | 8/3/2002 | 11.24 | 112.13 | 3.84 | 108.29 |
| | 9/4/2002 | 11.21 | 112.13 | 4.32 | 107.81 |
| | 10/4/2002 | 11.22 | 112.13 | 4.69 | 107.44 |
| | 11/4/2002 | 11.22 | 112.13 | 4.83 | 107.30 |
| | 12/2/2002 | 11.23 | 112.13 | 4.02 | 108.11 |
| | 1/6/2003 | 11.25 | 112.13 | 1.91 | 110.22 |
| | 2/5/2003 | 11.25 | 112.13 | 2.00 | 110.13 |
| | 3/7/2003 | 11.29 | 112.13 | 2.30 | 109.83 |
| | 4/8/2003 | 11.29 | 112.13 | 1.69 | 110.44 |
| | 5/12/2003 | 11.29 | 112.13 | 1.99 | 110.14 |
| | 8/2/2003 | 11.46 | 112.13 | 3.57 | 108.56 |
| | 11/8/2003 | 11.46 | 112.13 | 3.00 | 109.13 |
| | 2/5/2004 | 11.46 | 112.13 | 1.91 | 110.22 |
| | 5/4/2004 | 11.46 | 112.13 | 2.61 | 109.52 |
| | 8/9/2004 | 11.46 | 112.13 | 4.14 | 107.99 |
| | 11/5/2004 | 11.40 | 112.13 | 2.67 | 109.46 |
| | 2/6/2005 | 11.40 | 112.13 | 2.30 | 109.83 |
| | 5/13/2005 | 11.42 | 112.13 | 1.98 | 110.15 |
| MW-4 | 5/1/2002 | 11.34 | 112.76 | 2.44 | 110.32 |
| | 5/30/2002 | 11.14 | 112.76 | 3.28 | 109.48 |
| | 7/3/2002 | 11.11 | 112.76 | 3.84 | 108.92 |
| | 8/3/2002 | 11.14 | 112.76 | 4.32 | 108.44 |
| | 9/4/2002 | 11.12 | 112.76 | 4.86 | 107.90 |
| | 10/4/2002 | 11.12 | 112.76 | 5.24 | 107.52 |
| | 11/4/2002 | 11.05 | 112.76 | 5.36 | 107.40 |
| | 12/2/2002 | 11.08 | 112.76 | 4.51 | 108.25 |
| | 1/6/2003 | 11.05 | 112.76 | 2.04 | 110.72 |
| | 2/5/2003 | 11.06 | 112.76 | 2.17 | 110.59 |
| | 3/7/2003 | 11.24 | 112.76 | 2.51 | 110.25 |
| | 4/8/2003 | 11.24 | 112.76 | 1.69 | 111.07 |
| | 5/12/2003 | 11.24 | 112.76 | 3.14 | 109.62 |
| | 8/2/2003 | 11.32 | 112.76 | 4.03 | 108.73 |
| | 11/8/2003 | 11.32 | 112.76 | 3.31 | 109.45 |
| | 2/5/2004 | 11.32 | 112.76 | 2.03 | 110.73 |
| | 5/4/2004 | 11.32 | 112.76 | 2.85 | 109.91 |
| | 8/9/2004 | 11.32 | 112.76 | 4.64 | 108.12 |
| | 11/5/2004 | 11.20 | 112.76 | 2.87 | 109.89 |
| | 2/6/2005 | 11.27 | 112.76 | 2.51 | 110.25 |
| | 5/13/2005 | 11.24 | 112.76 | 2.14 | 110.62 |

Table 1 (cont.)
Water Levels
 Bigfoot Gas
 2801 Central Avenue
 McKinleyville, California 95519

| Sample Location | Date | Depth to Bottom/ Feet BGS | Survey Height/ Feet Above MSL | Depth to Water/ Feet BGS | Adjusted Elevation/ Feet Above MSL |
|-----------------|-----------|------------------------------|-------------------------------------|-----------------------------|--|
| MW-5 | 5/1/2002 | 11.10 | 112.62 | 1.43 | 111.19 |
| | 5/30/2002 | 11.11 | 112.62 | 2.71 | 109.91 |
| | 7/3/2002 | 11.12 | 112.62 | 3.31 | 109.31 |
| | 8/3/2002 | 11.14 | 112.62 | 3.85 | 108.77 |
| | 9/4/2002 | 11.12 | 112.62 | 4.37 | 108.25 |
| | 10/4/2002 | 11.15 | 112.62 | 4.85 | 107.77 |
| | 11/4/2002 | 11.15 | 112.62 | 4.97 | 107.65 |
| | 12/2/2002 | 11.13 | 112.62 | 4.02 | 108.60 |
| | 1/6/2003 | 11.15 | 112.62 | 1.11 | 111.51 |
| | 2/5/2003 | 11.18 | 112.62 | 1.23 | 111.39 |
| | 3/7/2003 | 11.15 | 112.62 | 1.70 | 110.92 |
| | 4/8/2003 | 11.15 | 112.62 | 0.95 | 111.67 |
| | 5/12/2003 | 11.15 | 112.62 | 1.33 | 111.29 |
| | 8/2/2003 | 11.36 | 112.62 | 3.53 | 109.09 |
| | 11/8/2003 | 11.36 | 112.62 | 2.67 | 109.95 |
| | 2/5/2004 | 11.36 | 112.62 | 1.10 | 111.52 |
| | 5/4/2004 | 11.36 | 112.62 | 2.18 | 110.44 |
| | 8/9/2004 | 11.35 | 112.62 | 4.17 | 108.45 |
| | 11/5/2004 | 11.34 | 112.62 | 2.19 | 110.43 |
| | 2/6/2005 | 11.32 | 112.62 | 1.62 | 111.00 |
| | 5/13/2005 | 11.30 | 112.62 | 1.24 | 111.38 |
| MW-6 | 5/1/2002 | 10.92 | 112.38 | 2.31 | 110.07 |
| | 5/30/2002 | 10.91 | 112.38 | 3.13 | 109.25 |
| | 7/3/2002 | 10.91 | 112.38 | 3.64 | 108.74 |
| | 8/3/2002 | 10.92 | 112.38 | 4.09 | 108.29 |
| | 9/4/2002 | 10.93 | 112.38 | 4.61 | 107.77 |
| | 10/4/2002 | 10.96 | 112.38 | 4.99 | 107.39 |
| | 11/4/2002 | 10.92 | 112.38 | 5.05 | 107.33 |
| | 12/2/2002 | 10.93 | 112.38 | 4.27 | 108.11 |
| | 1/6/2003 | 10.93 | 112.38 | 2.05 | 110.33 |
| | 2/5/2003 | 10.95 | 112.38 | 2.14 | 110.24 |
| | 3/7/2003 | 10.95 | 112.38 | 2.46 | 109.92 |
| | 4/8/2003 | 10.95 | 112.38 | 1.82 | 110.56 |
| | 5/12/2003 | 10.95 | 112.38 | 3.12 | 109.26 |
| | 8/2/2003 | 11.13 | 112.38 | 3.81 | 108.57 |
| | 11/8/2003 | 11.13 | 112.38 | 3.03 | 109.35 |
| | 2/5/2004 | 11.13 | 112.38 | 2.07 | 110.31 |
| | 5/4/2004 | 11.13 | 112.38 | 2.75 | 109.63 |
| | 8/9/2004 | 11.18 | 112.38 | 4.39 | 107.99 |
| | 11/5/2004 | 11.03 | 112.38 | 2.76 | 109.62 |
| | 2/6/2005 | 11.04 | 112.38 | 2.44 | 109.94 |
| | 5/13/2005 | 10.95 | 112.38 | 2.06 | 110.32 |

Notes:
 Bgs: Below Ground Surface
 MSL: Mean Sea Level

Table 2
Groundwater Analytical Results
 Bigfoot Gas
 2801 Central Avenue
 McKinleyville, California 95519

| Sample ID | Sample Location | Sample Date | TPHg (ppb) | Benzene (ppb) | Toluene (ppb) | Xylenes (ppb) | Ethylbenzene (ppb) | MTBE (ppb) | DIPE (ppb) | TAME (ppb) | ETBE (ppb) | TBA (ppb) | TPHd (ppb) | TPHmo (ppb) | TPHs (ppb) | Methanol (ppb) | Ethanol (ppb) | Dissolved Pb (ppb) |
|-----------|-----------------|-------------|-------------|---------------|---------------|---------------|--------------------|------------|------------|------------|------------|-------------|------------|-------------|------------|----------------|---------------|--------------------|
| TP-1 | Test Pit #1 | 5/8/1991 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ND < 50 | ---- | ---- | ---- | ---- | ---- |
| TP-2 | Test Pit #2 | 5/8/1991 | ND < 50 | ND < 0.5 | ND < 0.5 | ND < 0.5 | ND < 0.5 | ND < 0.5 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| TP-3 | Test Pit #3 | 5/8/1991 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ND < 50 | ---- | ---- | ---- |
| Premium | Premium | 7/11/1991 | 320,000 | 19,000 | 54,000 | 52,000 | 4,800 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| Kerosene | Kerosene | 7/11/1991 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 1,500 | ---- | ---- | ---- |
| SPBFB-1 | B-1 | 9/20/2000 | ND < 50 | ND < 0.50 | ND < 0.50 | 2.8 | ND < 0.50 | ND < 0.50 | ND < 0.50 | ND < 0.50 | ND < 0.50 | ND < 5.0 | ---- | ---- | ---- | ND < 50 | 23 | ND < 20 |
| SPBFB-2 | B-2 | 9/20/2000 | ND < 50 | ND < 0.50 | ND < 0.50 | 3.4 | ND < 0.50 | ND < 0.50 | ND < 0.50 | ND < 0.50 | ND < 0.50 | ND < 5.0 | ---- | ---- | ---- | ND < 50 | 70 | ND < 20 |
| SPBFB-3 | B-3 | 9/20/2000 | ND < 50 | ND < 0.50 | ND < 0.50 | 1.2 | ND < 0.50 | 0.54 | ND < 0.50 | ND < 0.50 | ND < 0.50 | ND < 5.0 | ---- | ---- | ---- | 82 | 110 | ND < 20 |
| SPBFB-6 | B-6 | 9/20/2000 | ND < 50 | ND < 0.50 | ND < 0.50 | ND < 0.50 | ND < 0.50 | 1.0 | ND < 0.50 | ND < 0.50 | ND < 0.50 | ND < 5.0 | ---- | ---- | ---- | ND < 50 | ND < 5.0 | ND < 20 |
| SPBFB-7 | B-7 | 9/20/2000 | 6,400 | 660 | 110 | 440 | 380 | 260 | ND < 2.0 | 4.0 | ND < 2.0 | 67 | ---- | ---- | ---- | ND < 200 | ND < 20 | ND < 20 |
| SPBFB-8 | B-8 | 9/20/2000 | 140 | ND < 0.50 | ND < 0.50 | ND < 0.50 | ND < 0.50 | 580 | ND < 0.50 | 85 | ND < 0.50 | ND < 5.0 | ---- | ---- | ---- | ND < 50 | ND < 5.0 | ND < 20 |
| SPBFB-9 | B-9 | 9/20/2000 | ND < 50 | ND < 0.50 | ND < 0.50 | ND < 0.50 | ND < 0.50 | 180 | ND < 0.50 | 9.9 | ND < 0.50 | 26 | ---- | ---- | ---- | ND < 50 | 16 | ND < 20 |
| SPBFB-10 | B-10 | 9/20/2000 | 990 | 210 | 3.8 | 3.2 | 13 | 380 | ND < 0.50 | ND < 0.50 | 5.4 | 7.6 | ---- | ---- | ---- | ND < 50 | ND < 20 | ND < 20 |
| SBGW-11 | B-11 | 4/22/2002 | 27,300 | 656 | 5,440 | 6,280 | 715 | 1,610 | ND < 0.5 | 255 | ND < 0.5 | ND < 50 | 1,250 | ND < 50 | ---- | ---- | ---- | ---- |
| SBGW-13 | B-13 | 4/22/2002 | ND < 50 | ND < 0.3 | 0.5 | 1.1 | ND < 0.3 | ND < 2.0 | ND < 0.5 | ND < 0.5 | ND < 0.5 | ND < 50 | ND < 50 | ND < 50 | ---- | ---- | ---- | ---- |
| SBGW-14 | B-14 | 4/22/2002 | 165 | 104 | 0.6 | 1 | ND < 0.3 | ND < 2.0 | ND < 0.5 | ND < 0.5 | ND < 0.5 | ND < 50 | ND < 50 | ND < 50 | ---- | ---- | ---- | ---- |
| SBGW-15 | B-15 | 4/22/2002 | 263 | ND < 0.3 | 5.3 | 24.5 | 1.8 | ND < 2.0 | ND < 0.5 | ND < 0.5 | ND < 0.5 | ND < 50 | ND < 50 | ND < 50 | ---- | ---- | ---- | ---- |
| SBGW-16 | B-16 | 4/22/2002 | ND < 50 | ND < 0.3 | ND < 0.3 | ND < 0.6 | ND < 0.3 | ND < 2.0 | ND < 0.5 | ND < 0.5 | ND < 0.5 | ND < 50 | ND < 50 | ND < 50 | ---- | ---- | ---- | ---- |
| SBGW-17 | B-17 | 4/22/2002 | ND < 25,000 | ND < 150 | ND < 150 | ND < 300 | ND < 150 | ND < 1,000 | ND < 250 | ND < 250 | ND < 250 | ND < 25,000 | 298,000 | ND < 50 | ---- | ---- | ---- | ---- |
| SBGW-18 | B-18 | 4/22/2002 | ND < 50 | ND < 0.3 | 1.0 | 2.6 | ND < 0.3 | 2.1 | ND < 0.5 | ND < 0.5 | ND < 0.5 | ND < 50 | ND < 50 | ND < 50 | ---- | ---- | ---- | ---- |

notes:

TPHg: Total petroleum hydrocarbons as gasoline.

MTBE: Methyl tertiary butyl ether

DIPE: Diisopropyl Ether

TAME: Tertiary amyl methyl ether

ETBE: Ethyl tertiary butyl ether

TPHd: Total petroleum hydrocarbons as diesel

TPHmo: Total petroleum hydrocarbons as motor oil

TBA: Tertiary butanol

TPHs: Total petroleum hydrocarbons as solvent

ppb: parts per billion = $\mu\text{g/l} \times .001 \text{ mg/l} = 0.001 \text{ ppm}$.

ND: Not detected at or below the method detection limit as shown.

Table 3
Soil Analytical Results
 Bigfoot Gas
 2801 Central Avenue
 McKinleyville, California 95519

| Sample ID | Sample Location | Sample Date | TPHg (ppm) | Benzene (ppm) | Toluene (ppm) | Xylenes (ppm) | Ethylbenzene (ppm) | MTBE (ppm) | DIPE (ppm) | TAME (ppm) | ETBE (ppm) | TBA (ppm) | TPHd (ppm) | TPHs (ppm) | Lead (ppm) |
|----------------|-----------------|-------------|------------|---------------|---------------|---------------|--------------------|------------|------------|------------|------------|-----------|------------|------------|------------|
| W-1 | BF West #1 | 6/18/1991 | 3 | ND < 0.005 | 0.0067 | 0.049 | ND < 0.005 | --- | --- | --- | --- | --- | --- | --- | --- |
| W-2 | BF West #2 | 6/18/1991 | 1.6 | ND < 0.005 | 0.0067 | 0.02 | ND < 0.005 | --- | --- | --- | --- | --- | --- | --- | --- |
| E-1 | BF East #1 | 6/27/1991 | 130 | 0.16 | 0.93 | ND < 2.0 | ND < 2.0 | --- | --- | --- | --- | --- | --- | --- | --- |
| E-2 | BF East #2 | 6/27/1991 | 210 | 1.9 | 17 | 20 | 3.4 | --- | --- | --- | --- | --- | --- | --- | --- |
| E-3 | BF East #3 | 6/27/1991 | 8 | 0.12 | 0.15 | 0.22 | 0.057 | --- | --- | --- | --- | --- | --- | --- | --- |
| S-1 | BF South #1 | 6/27/1991 | 88 | 0.062 | 0.18 | 0.34 | 0.065 | --- | --- | --- | --- | --- | --- | --- | --- |
| PN @ 5'6" | Premium North | 7/11/1991 | 7 | 0.049 | 0.0800 | 0.210 | 0.074 | --- | --- | --- | --- | --- | --- | --- | --- |
| PS @ 5'6" | Premium South | 7/11/1991 | 350 | ND < 0.50 | 2.6 | 12.00 | 1.5 | --- | --- | --- | --- | --- | --- | --- | --- |
| S-1 @ 1'6" | South #1 | 7/11/1991 | 36 | 0.0099 | 0.075 | 0.15 | 0.026 | --- | --- | --- | --- | --- | --- | --- | --- |
| S-3 @ 1'6" | South #3 | 7/11/1991 | 5,000 | 14 | 280 | 510 | 96 | --- | --- | --- | --- | --- | --- | --- | --- |
| KE @ 6' | Kerosene East | 7/11/1991 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | ND < 1.0 | --- |
| KW @ 6' | Kerosene West | 7/11/1991 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | ND < 1.0 | --- |
| B-1 @ 3.5' | B-1 | 3/22/1995 | ND < 1 | ND < 0.005 | ND < 0.005 | ND < 0.005 | ND < 0.005 | --- | --- | --- | --- | --- | --- | --- | ND < 5 |
| B-1 @ 5.5' | B-1 | 3/22/1995 | ND < 1 | ND < 0.005 | ND < 0.005 | ND < 0.005 | ND < 0.005 | --- | --- | --- | --- | --- | --- | --- | ND < 5 |
| SB-1A @ 1.5' | SB-1 | 11/7/1995 | 4,200 | ND < 1 | 49 | 370 | 27 | --- | --- | --- | --- | --- | --- | --- | --- |
| SB-1B @ 3' | SB-1 | 11/7/1995 | 5,600 | ND < 2 | 97 | 590 | 59 | --- | --- | --- | --- | --- | --- | --- | --- |
| SB-1C @ 5.5' | SB-1 | 11/7/1995 | 2,200 | 0.91 | 55 | 240 | 24 | --- | --- | --- | --- | --- | --- | --- | --- |
| SB-2A @ 3' | SB-2 | 11/7/1995 | ND < 1 | ND < 0.005 | ND < 0.005 | ND < 0.02 | ND < 0.005 | --- | --- | --- | --- | --- | --- | --- | --- |
| SB-2B @ 7.5' | SB-2 | 11/7/1995 | 23 | 0.15 | 0.014 | 0.220 | 0.1200 | --- | --- | --- | --- | --- | --- | --- | --- |
| SB-3A @ 2' | SB-3 | 11/7/1995 | ND < 0.2 | ND < 0.005 | ND < 0.005 | ND < 0.005 | ND < 0.005 | --- | --- | --- | --- | --- | ND < 1 | ND < 1 | --- |
| SB-4A @ 2' | SB-4 | 11/7/1995 | ND < 1 | ND < 0.005 | ND < 0.005 | ND < 0.02 | ND < 0.005 | --- | --- | --- | --- | --- | ND < 1 | ND < 1 | --- |
| SPBFB-1 @ 5' | B-1 | 9/20/2000 | ND < 1.0 | ND < 0.0050 | ND < 0.0050 | ND < 0.0050 | ND < 0.0050 | ND < 0.050 | --- | --- | --- | --- | --- | --- | --- |
| SPBFB-1 @ 10' | B-1 | 9/20/2000 | ND < 1.0 | ND < 0.005 | ND < 0.005 | ND < 0.005 | ND < 0.005 | ND < 0.050 | --- | --- | --- | --- | --- | --- | --- |
| SPBFB-2 @ 5' | B-2 | 9/20/2000 | ND < 1.0 | ND < 0.0050 | ND < 0.0050 | ND < 0.0050 | ND < 0.0050 | ND < 0.050 | --- | --- | --- | --- | --- | --- | --- |
| SPBFB-2 @ 9' | B-2 | 9/20/2000 | ND < 1.0 | ND < 0.005 | ND < 0.005 | ND < 0.005 | ND < 0.005 | ND < 0.050 | --- | --- | --- | --- | --- | --- | --- |
| SPBFB-3 @ 5' | B-3 | 9/20/2000 | ND < 1.0 | ND < 0.0050 | ND < 0.0050 | ND < 0.0050 | ND < 0.0050 | ND < 0.050 | --- | --- | --- | --- | --- | --- | --- |
| SPBFB-3 @ 10' | B-3 | 9/20/2000 | ND < 1.0 | ND < 0.005 | ND < 0.005 | ND < 0.005 | ND < 0.005 | ND < 0.050 | --- | --- | --- | --- | --- | --- | --- |
| SPBFB-5 @ 6" | B-5 | 9/20/2000 | 22 | ND < 0.0050 | 0.0096 | 0.077 | 0.0090 | ND < 0.050 | --- | --- | --- | --- | 2,900 | --- | --- |
| SPBFB-6 @ 5' | B-6 | 9/20/2000 | ND < 1.0 | ND < 0.0050 | ND < 0.0050 | ND < 0.0050 | ND < 0.0050 | ND < 0.050 | --- | --- | --- | --- | --- | --- | --- |
| SPBFB-6 @ 7' | B-6 | 9/20/2000 | ND < 1.0 | ND < 0.005 | ND < 0.005 | ND < 0.005 | ND < 0.005 | ND < 0.050 | --- | --- | --- | --- | --- | --- | --- |
| SPBFB-7 @ 5' | B-7 | 9/20/2000 | ND < 1.0 | ND < 0.0050 | ND < 0.0050 | ND < 0.0050 | ND < 0.0050 | ND < 0.050 | --- | --- | --- | --- | --- | --- | --- |
| SPBFB-7 @ 7.4' | B-7 | 9/20/2000 | ND < 1.0 | 0.0061 | ND < 0.005 | ND < 0.005 | ND < 0.005 | ND < 0.050 | --- | --- | --- | --- | --- | --- | --- |
| SPBFB-8 @ 5' | B-8 | 9/20/2000 | ND < 1.0 | ND < 0.0050 | ND < 0.0050 | ND < 0.0050 | ND < 0.0050 | 0.15 | --- | --- | --- | --- | --- | --- | --- |

Table 3 (cont.)
Soil Analytical Results
 Bigfoot Gas
 2801 Central Avenue
 McKinleyville, California 95519

| Sample ID | Sample Location | Sample Date | TPHg (ppm) | Benzene (ppm) | Toluene (ppm) | Xylenes (ppm) | Ethylbenzene (ppm) | MTBE (ppm) | DIPE (ppm) | TAME (ppm) | ETBE (ppm) | TBA (ppm) | TPHd (ppm) | TPHs (ppm) | Lead (ppm) |
|----------------|-----------------|-------------|------------|---------------|---------------|---------------|--------------------|------------|------------|------------|------------|-----------|------------|------------|------------|
| SPBFB-8 @ 7.5' | B-8 | 9/20/2000 | ND < 1.0 | ND < 0.005 | ND < 0.005 | ND < 0.005 | ND < 0.005 | ND < 0.050 | --- | --- | --- | --- | --- | --- | --- |
| SPBFB-9 @ 10' | B-9 | 9/20/2000 | ND < 1.0 | ND < 0.005 | ND < 0.005 | ND < 0.005 | ND < 0.005 | ND < 0.050 | --- | --- | --- | --- | --- | --- | --- |
| SPBFB-10 @ 5' | B-10 | 9/20/2000 | 1.1 | ND < 0.0050 | ND < 0.0050 | ND < 0.0050 | ND < 0.0050 | ND < 0.050 | --- | --- | --- | --- | --- | --- | --- |
| SPBFB-10 @ 6" | B-10 | 9/20/2000 | 1,400 | ND < 1.0 | ND < 15 | ND < 12 | ND < 12 | ND < 3.0 | --- | --- | --- | --- | --- | --- | --- |
| SPBFB-10 @ 9' | B-10 | 9/20/2000 | ND < 1.0 | 0.014 | ND < 0.005 | ND < 0.005 | ND < 0.005 | ND < 0.050 | --- | --- | --- | --- | --- | --- | --- |
| SB-11 @ 4' | B-11 | 4/22/2002 | 2,342 | 0.068 | 0.447 | 0.995 | 0.116 | ND < 0.005 | ND < 0.005 | ND < 0.005 | ND < 0.005 | ND < 5 | --- | --- | --- |
| SB-13 @ 4' | B-13 | 4/22/2002 | ND < 0.060 | ND < 0.005 | ND < 0.005 | ND < 0.015 | ND < 0.005 | ND < 0.005 | ND < 0.005 | ND < 0.005 | ND < 0.005 | ND < 5 | --- | --- | --- |
| SB-13 @ 8' | B-13 | 4/22/2002 | ND < 0.060 | ND < 0.005 | ND < 0.005 | ND < 0.015 | ND < 0.005 | ND < 0.005 | ND < 0.005 | ND < 0.005 | ND < 0.005 | ND < 5 | --- | --- | --- |
| SB-13 @ 12' | B-13 | 4/22/2002 | ND < 0.060 | ND < 0.005 | ND < 0.005 | ND < 0.015 | ND < 0.005 | ND < 0.005 | ND < 0.005 | ND < 0.005 | ND < 0.005 | ND < 5 | --- | --- | --- |
| SB-14 @ 4' | B-14 | 4/22/2002 | ND < 0.060 | ND < 0.005 | ND < 0.005 | ND < 0.015 | ND < 0.005 | ND < 0.005 | ND < 0.005 | ND < 0.005 | ND < 0.005 | ND < 5 | --- | --- | --- |
| SB-14 @ 8' | B-14 | 4/22/2002 | 1.99 | ND < 0.005 | ND < 0.005 | ND < 0.015 | ND < 0.005 | ND < 0.005 | ND < 0.005 | ND < 0.005 | ND < 0.005 | ND < 5 | --- | --- | --- |
| SB-14 @ 12' | B-14 | 4/22/2002 | 0.625 | ND < 0.005 | ND < 0.005 | ND < 0.015 | ND < 0.005 | ND < 0.005 | ND < 0.005 | ND < 0.005 | ND < 0.005 | ND < 5 | --- | --- | --- |
| SB-15 @ 4' | B-15 | 4/22/2002 | ND < 0.060 | ND < 0.005 | ND < 0.005 | ND < 0.015 | ND < 0.005 | ND < 0.005 | ND < 0.005 | ND < 0.005 | ND < 0.005 | ND < 5 | --- | --- | --- |
| SB-15 @ 8' | B-15 | 4/22/2002 | ND < 0.060 | ND < 0.005 | ND < 0.005 | ND < 0.015 | ND < 0.005 | ND < 0.005 | ND < 0.005 | ND < 0.005 | ND < 0.005 | ND < 5 | --- | --- | --- |
| SB-15 @ 12' | B-15 | 4/22/2002 | ND < 0.060 | ND < 0.005 | ND < 0.005 | ND < 0.015 | ND < 0.005 | ND < 0.005 | ND < 0.005 | ND < 0.005 | ND < 0.005 | ND < 5 | --- | --- | --- |
| SB-16 @ 4' | B-16 | 4/22/2002 | ND < 0.060 | ND < 0.005 | ND < 0.005 | ND < 0.015 | ND < 0.005 | ND < 0.005 | ND < 0.005 | ND < 0.005 | ND < 0.005 | ND < 5 | --- | --- | --- |
| SB-16 @ 8' | B-16 | 4/22/2002 | ND < 0.060 | ND < 0.005 | ND < 0.005 | ND < 0.015 | ND < 0.005 | ND < 0.005 | ND < 0.005 | ND < 0.005 | ND < 0.005 | ND < 5 | --- | --- | --- |
| SB-16 @ 12' | B-16 | 4/22/2002 | ND < 0.060 | ND < 0.005 | ND < 0.005 | ND < 0.015 | ND < 0.005 | ND < 0.005 | ND < 0.005 | ND < 0.005 | ND < 0.005 | ND < 5 | --- | --- | --- |
| SB-17 @ 4' | B-17 | 4/22/2002 | ND < 0.060 | ND < 0.005 | ND < 0.005 | ND < 0.015 | ND < 0.005 | 0.023 | ND < 0.005 | ND < 0.005 | ND < 0.005 | ND < 5 | --- | --- | --- |
| SB-17 @ 8' | B-17 | 4/22/2002 | ND < 0.060 | ND < 0.005 | ND < 0.005 | ND < 0.015 | ND < 0.005 | 0.007 | ND < 0.005 | ND < 0.005 | ND < 0.005 | ND < 5 | --- | --- | --- |
| SB-17 @ 12' | B-17 | 4/22/2002 | ND < 0.060 | ND < 0.005 | ND < 0.005 | ND < 0.015 | ND < 0.005 | ND < 0.005 | ND < 0.005 | ND < 0.005 | ND < 0.005 | ND < 5 | --- | --- | --- |
| SB-18 @ 4' | B-18 | 4/22/2002 | ND < 0.060 | ND < 0.005 | ND < 0.005 | ND < 0.015 | ND < 0.005 | ND < 0.005 | ND < 0.005 | ND < 0.005 | ND < 0.005 | ND < 5 | --- | --- | --- |
| SB-18 @ 8' | B-18 | 4/22/2002 | ND < 0.060 | ND < 0.005 | ND < 0.005 | ND < 0.015 | ND < 0.005 | ND < 0.005 | ND < 0.005 | ND < 0.005 | ND < 0.005 | ND < 5 | --- | --- | --- |
| SB-18 @ 12' | B-18 | 4/22/2002 | ND < 0.060 | ND < 0.005 | ND < 0.005 | ND < 0.015 | ND < 0.005 | ND < 0.005 | ND < 0.005 | ND < 0.005 | ND < 0.005 | ND < 5 | --- | --- | --- |

Notes:

TPHg: Total petroleum hydrocarbons as gasoline

MTBE: Methyl tertiary butyl ether

TAME: Tertiary amyl methyl ether

DIPE: Diisopropyl ether

TPHs: Total petroleum hydrocarbons as solvent

ETBE: Ethyl tertiary butyl ether

TBA: Tertiary butanol

ppm: parts per million = $\mu\text{g/g}$ = mg/kg = $1000\mu\text{g/kg}$.

ND: Not detected at or below the method detection limit as shown.

Table 4
Groundwater Analytical Results from Monitoring Wells
 Bigfoot Gas
 2801 Central Avenue
 McKinleyville, California 95519

| Sample Location | Sample Event | Annual Quarter | Sample Date | TPHg (ppb) | Benzene (ppb) | Toluene (ppb) | Xylenes (ppb) | Ethylbenzene (ppb) | MTBE (ppb) | DIPE (ppb) | TAME (ppb) | ETBE (ppb) | TBA (ppb) | TPHd (ppb) | TPHmo (ppb) | EDC (ppb) | EDB (ppb) |
|-----------------|-------------------|----------------|-------------|------------|---------------|---------------|---------------|--------------------|------------|------------|------------|------------|-----------|------------|-------------|-----------|-----------|
| MW-1 | Well Installation | 2nd Quarter | 5/1/2002 | ND < 50 | ND < 0.3 | 0.3 | ND < 0.6 | ND < 0.3 | 10.5 | ND < 0.5 | ND < 0.5 | ND < 0.5 | ND < 100 | ND < 50 | ND < 50 | NT | NT |
| | 1st Quarterly | 3rd Quarter | 8/3/2002 | 91 | ND < 0.3 | ND < 0.3 | ND < 0.6 | ND < 0.3 | 114 | ND < 0.5 | 7.5 | ND < 0.5 | ND < 100 | ND < 50 | ND < 50 | NT | NT |
| | 2nd Quarterly | 4th Quarter | 11/4/2002 | 90.4 | ND < 0.3 | ND < 0.3 | ND < 0.6 | ND < 0.3 | 94.7 | ND < 0.5 | 7.6 | ND < 0.5 | ND < 100 | ND < 50 | ND < 50 | ND < 0.5 | ND < 0.5 |
| | 3rd Quarterly | 1st Quarter | 2/5/2003 | ND < 50 | ND < 0.5 | ND < 0.5 | ND < 1 | ND < 0.5 | ND < 0.5 | ND < 0.5 | ND < 0.5 | ND < 0.5 | ND < 5.0 | ND < 50 | ND < 500 | ND < 0.5 | ND < 0.5 |
| | 4th Quarterly | 2nd Quarter | 5/12/2003 | ND < 50 | ND < 0.5 | ND < 0.5 | ND < 1 | ND < 0.5 | ND < 0.5 | ND < 0.5 | ND < 0.5 | ND < 0.5 | ND < 5.0 | ND < 50 | ND < 500 | ND < 0.5 | ND < 0.5 |
| | 5th Quarterly | 3rd Quarter | 8/2/2003 | ND < 50 | ND < 0.5 | ND < 0.5 | ND < 1.0 | ND < 0.5 | 23 | ND < 0.5 | 1.0 | ND < 0.5 | ND < 5.0 | ND < 50 | ND < 500 | ND < 0.5 | ND < 0.5 |
| | 6th Quarterly | 4th Quarter | 11/8/2003 | ND < 50 | ND < 0.5 | ND < 0.5 | ND < 1.0 | ND < 0.5 | 88 | ND < 0.5 | 3.5 | ND < 0.5 | ND < 5.0 | ND < 50 | ND < 500 | ND < 0.5 | ND < 0.5 |
| | 7th Quarterly | 1st Quarter | 2/5/2004 | ND < 50 | ND < 0.5 | ND < 0.5 | ND < 1.0 | ND < 0.5 | 0.5 | ND < 0.5 | ND < 0.5 | ND < 0.5 | ND < 5.0 | ND < 50 | ND < 500 | ND < 0.5 | ND < 0.5 |
| | 8th Quarterly | 2nd Quarter | 5/4/2004 | ND < 50 | ND < 0.5 | ND < 0.5 | ND < 1.0 | ND < 0.5 | 0.5 | ND < 0.5 | ND < 0.5 | ND < 0.5 | ND < 5.0 | ND < 50 | ND < 500 | ND < 0.5 | ND < 0.5 |
| | 9th Quarterly | 3rd Quarter | 8/9/2004 | ND < 50 | ND < 0.5 | ND < 0.5 | ND < 1.5 | ND < 0.5 | 34.0 | ND < 0.5 | 1.2 | ND < 0.5 | ND < 5.0 | 160 | ND < 500 | ND < 0.5 | ND < 0.5 |
| | 10th Quarterly | 4th Quarter | 11/5/2004 | ND < 50 | ND < 0.5 | ND < 0.5 | ND < 1.5 | ND < 0.5 | 14 | ND < 0.5 | ND < 0.5 | ND < 0.5 | ND < 5.0 | ND < 50 | ND < 500 | ND < 0.5 | ND < 0.5 |
| | 11th Quarterly | 1st Quarter | 2/6/2005 | ND < 50 | ND < 0.5 | ND < 0.5 | ND < 1.0 | ND < 0.5 | ND < 1.0 | ND < 0.5 | ND < 0.5 | ND < 0.5 | ND < 50.0 | ND < 50 | ND < 50 | ---- | ---- |
| | 12th Quarterly | 2nd Quarter | 5/13/2005 | ND < 50 | ND < 0.5 | ND < 0.5 | ND < 1.0 | ND < 0.5 | ND < 1.0 | ND < 0.5 | ND < 0.5 | ND < 0.5 | ND < 50.0 | ND < 50 | ND < 50 | ---- | ---- |
| MW-2 | Well Installation | 2nd Quarter | 5/1/2002 | 498 | ND < 0.3 | ND < 0.3 | 3.9 | 1.3 | 1,380 | ND < 0.5 | 552 | ND < 0.5 | ND < 100 | ND < 50 | ND < 50 | NT | NT |
| | 1st Quarterly | 3rd Quarter | 8/3/2002 | 8,870 | 15.7 | 0.5 | 3.9 | 2.2 | 8,160 | ND < 0.5 | 3,460 | ND < 0.5 | ND < 100 | ND < 50 | ND < 50 | NT | NT |
| | 2nd Quarterly | 4th Quarter | 11/4/2002 | 674 | 28.3 | ND < 0.3 | ND < 0.6 | ND < 0.3 | 1,130 | ND < 0.5 | 526 | ND < 0.5 | ND < 50 | ND < 50 | ND < 50 | ND < 0.5 | ND < 0.5 |
| | 3rd Quarterly | 1st Quarter | 2/5/2003 | 1,280 | 0.5 | ND < 0.5 | ND < 1 | ND < 0.5 | 1,900 | ND < 0.5 | 800 | 4.9 | 690 | ND < 50 | ND < 500 | ND < 0.5 | ND < 0.5 |
| | 4th Quarterly | 2nd Quarter | 5/12/2003 | 540 | ND < 50 | ND < 50 | ND < 100 | ND < 50 | 730 | ND < 50 | 140 | ND < 50 | ND < 500 | ND < 50 | ND < 500 | ND < 0.5 | ND < 50 |
| | 5th Quarterly | 3rd Quarter | 8/2/2003 | ND < 5,000 | ND < 50 | ND < 50 | ND < 100 | ND < 50 | 1,200 | ND < 50 | 430 | ND < 50 | ND < 500 | 140 | ND < 500 | ND < 50 | ND < 50 |
| | 6th Quarterly | 4th Quarter | 11/8/2003 | 790 | ND < 50 | ND < 50 | ND < 100 | ND < 50 | 4,200 | ND < 50 | 1,800 | ND < 50 | ND < 500 | 150 | ND < 500 | ND < 50 | ND < 50 |
| | 7th Quarterly | 1st Quarter | 2/5/2004 | 440 | ND < 50 | 85 | 120 | ND < 50 | 1,700 | ND < 50 | 860 | ND < 50 | ND < 500 | 93 | ND < 500 | ND < 50 | ND < 50 |
| | 8th Quarterly | 2nd Quarter | 5/4/2004 | 1,300 | ND < 5.0 | ND < 5.0 | ND < 10.0 | ND < 5.0 | 1,200 | ND < 50 | 530 | ND < 50 | ND < 500 | 190 | ND < 500 | ND < 50 | ND < 50 |
| | 9th Quarterly | 3rd Quarter | 8/9/2004 | 1,900 | ND < 5.0 | ND < 5.0 | ND < 15.0 | ND < 5.0 | 2,700 | ND < 50 | 1,100 | 7.2 | 730 | 420 | ND < 500 | ND < 5.0 | ND < 5.0 |
| | 10th Quarterly | 4th Quarter | 11/5/2004 | 1,400 | 5.8 | ND < 5.0 | ND < 15.0 | ND < 5.0 | 970 | ND < 50 | 460 | ND < 5.0 | 230 | 160 | ND < 500 | ND < 5.0 | ND < 5.0 |
| | 11th Quarterly | 1st Quarter | 2/6/2005 | 1,230 | ND < 0.5 | ND < 0.5 | ND < 1.0 | ND < 0.5 | 1,170 | ND < 0.5 | 504 | 3.6 | 279 | 208 | 166 | ---- | ---- |
| | 12th Quarterly | 2nd Quarter | 5/13/2005 | 658 | ND < 2.0 | ND < 2.0 | ND < 4.0 | ND < 2.0 | 533 | ND < 2.0 | 241 | ND < 2.0 | ND < 200 | 136 | 120 | ---- | ---- |
| MW-3 | Well Installation | 2nd Quarter | 5/1/2002 | 102 | 2.9 | ND < 0.3 | 5.0 | 0.8 | 153 | ND < 0.5 | 46.3 | ND < 0.5 | ND < 100 | ND < 50 | ND < 50 | NT | NT |
| | 1st Quarterly | 3rd Quarter | 8/3/2002 | 8,260 | 383 | 145 | 1,970 | 420 | 4,000 | ND < 0.5 | 1,580 | ND < 0.5 | ND < 100 | 916 | ND < 50 | NT | NT |
| | 2nd Quarterly | 4th Quarter | 11/4/2002 | 537 | 30.8 | 0.7 | 39.5 | 24.9 | 928 | ND < 0.5 | 358 | ND < 0.5 | ND < 50 | ND < 50 | ND < 50 | ND < 0.5 | ND < 0.5 |
| | 3rd Quarterly | 1st Quarter | 2/5/2003 | ND < 50 | ND < 0.5 | ND < 0.5 | ND < 1 | ND < 0.5 | 100 | ND < 0.5 | 27 | ND < 0.5 | 17 | ND < 50 | ND < 500 | 1.6 | ND < 0.5 |
| | 4th Quarterly | 2nd Quarter | 5/12/2003 | ND < 50 | ND < 0.5 | ND < 0.5 | ND < 1 | ND < 0.5 | 28 | ND < 0.5 | 5.5 | ND < 0.5 | ND < 5.0 | ND < 50 | ND < 500 | 1.2 | ND < 0.5 |
| | 5th Quarterly | 3rd Quarter | 8/2/2003 | 6,400 | 75 | ND < 5.0 | 1,000 | 460 | 1,200 | ND < 50 | 540 | ND < 5.0 | 530 | ND < 50 | ND < 500 | ND < 5.0 | ND < 5.0 |
| | 6th Quarterly | 4th Quarter | 11/8/2003 | 52 | ND < 0.5 | ND < 0.5 | 1.2 | 0.5 | 120 | ND < 0.5 | 68 | ND < 0.5 | ND < 5.0 | ND < 50 | ND < 500 | ND < 0.5 | ND < 0.5 |
| | 7th Quarterly | 1st Quarter | 2/5/2004 | ND < 50 | ND < 0.5 | ND < 0.5 | ND < 1 | ND < 0.5 | 40 | ND < 0.5 | 9.4 | ND < 0.5 | ND < 5.0 | ND < 50 | ND < 500 | 0.9 | ND < 0.5 |
| | 8th Quarterly | 2nd Quarter | 5/4/2004 | 82 | ND < 0.5 | ND < 0.5 | 0.5 | ND < 0.5 | 57 | ND < 0.5 | 32 | ND < 0.5 | ND < 5.0 | 55 | ND < 500 | ND < 0.5 | ND < 0.5 |
| | 9th Quarterly | 3rd Quarter | 8/9/2004 | 970 | 6.0 | ND < 0.5 | ND < 1.5 | 3.6 | 1,500 | ND < 0.5 | 530 | ND < 0.5 | 90 | 250 | ND < 500 | 1.5 | ND < 0.5 |
| | 10th Quarterly | 4th Quarter | 11/5/2004 | 100 | ND < 0.5 | ND < 0.5 | ND < 1.5 | ND < 0.5 | 63 | ND < 0.5 | 19 | ND < 0.5 | ND < 5.0 | 240 | ND < 500 | ND < 0.5 | ND < 0.5 |
| | 11th Quarterly | 1st Quarter | 2/6/2005 | 183 | ND < 0.5 | ND < 0.5 | ND < 1.0 | ND < 0.5 | 172 | ND < 0.5 | 56.1 | ND < 0.5 | ND < 50 | 51 | 95 | ---- | ---- |
| | 12th Quarterly | 2nd Quarter | 5/13/2005 | 183 | ND < 1.2 | ND < 1.2 | ND < 2.5 | ND < 1.2 | 163 | ND < 1.2 | 52.6 | ND < 1.2 | ND < 125 | 70 | 84 | ---- | ---- |

TPHg: Total petroleum hydrocarbons as gasoline
 MTBE: Methyl tertiary butyl ether
 DIPE: Diisopropyl ether
 TAME: Tertiary amyl methyl ether
 TPHd: Total petroleum hydrocarbons as diesel
 NT: Not tested.

TBA: Tertiary butanol
 ETBE: Ethyl tertiary butyl ether
 TPHmo: Total petroleum hydrocarbons as motor oil
 ppb: parts per billion = µg/l = .001 mg/l = 0.001 ppm.
 ND: Not detected. Sample was detected at or below the method detection limit as shown.

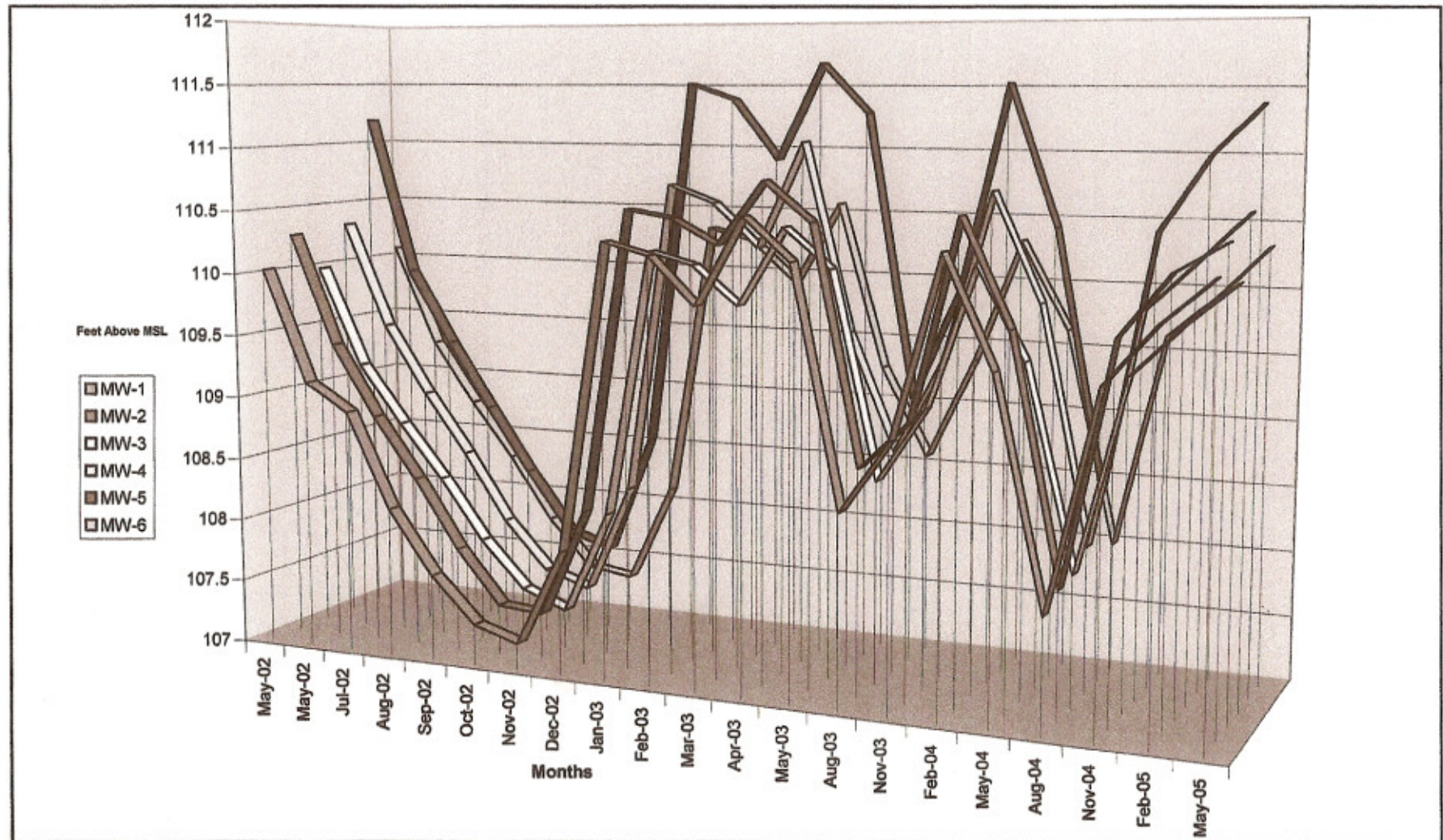
Table 4 (cont.)
Groundwater Analytical Results from Monitoring Wells
 Bigfoot Gas
 2801 Central Avenue
 McKinleyville, California 95519

| Sample Location | Sample Event | Annual Quarter | Sample Date | TPHg (ppb) | Benzene (ppb) | Toluene (ppb) | Xylenes (ppb) | Ethylbenzene (ppb) | MTBE (ppb) | DIPE (ppb) | TAME (ppb) | ETBE (ppb) | TBA (ppb) | TPHd (ppb) | TPHmo (ppb) | EDC (ppb) | EDB (ppb) |
|-----------------|-------------------|----------------|-------------|------------|---------------|---------------|---------------|--------------------|------------|------------|------------|------------|--------------|------------|-------------|-----------|-----------|
| MW-4 | Well Installation | 2nd Quarter | 5/1/2002 | 7,970 | 157 | 356 | 1,270 | 483 | ND < 20 | ND < 5 | ND < 5 | ND < 5 | ND < 1,000 | 489 | ND < 50 | NT | NT |
| | 1st Quarterly | 3rd Quarter | 8/3/2002 | 9,150 | 193 | 720 | 2,430 | 1,080 | 53 | ND < 15 | ND < 15 | ND < 15 | ND < 5,000 | 2,770 | ND < 50 | NT | NT |
| | 2nd Quarterly | 4th Quarter | 11/4/2002 | 6,090 | 207 | 343 | 712 | 530 | ND < 2.0 | ND < 0.5 | ND < 0.5 | ND < 0.5 | ND < 50 | 159 | ND < 50 | ND < 0.5 | ND < 0.5 |
| | 3rd Quarterly | 1st Quarter | 2/5/2003 | 20,000 | 170 | 120 | 890 | 600 | ND < 5.0 | ND < 5.0 | ND < 5.0 | ND < 5.0 | ND < 50 | 2,000 | ND < 500 | ND < 5.0 | ND < 5.0 |
| | 4th Quarterly | 2nd Quarter | 5/12/2003 | 6,200 | 96 | 77 | 248 | 220 | ND < 50 | ND < 50 | ND < 50 | ND < 50 | ND < 500 | 680 | ND < 500 | ND < 50 | ND < 50 |
| | 5th Quarterly | 3rd Quarter | 8/2/2003 | 7,700 | 130 | 59 | 406 | 470 | 31 | ND < 5.0 | 20 | ND < 5.0 | ND < 50 | ND < 50 | ND < 500 | ND < 5.0 | ND < 5.0 |
| | 6th Quarterly | 4th Quarter | 11/8/2003 | 7,900 | 260 | 190 | 385 | 480 | 56 | ND < 5.0 | ND < 5.0 | ND < 5.0 | ND < 50 | 500 | ND < 500 | ND < 5.0 | ND < 5.0 |
| | 7th Quarterly | 1st Quarter | 2/5/2004 | 7,600 | 180 | 110 | 334 | 460 | 29 | ND < 5.0 | ND < 5.0 | ND < 5.0 | ND < 50 | ND < 50 | ND < 500 | ND < 5.0 | ND < 5.0 |
| | 8th Quarterly | 2nd Quarter | 5/4/2004 | 8,000 | 130 | 140 | 504 | 420 | 19 | ND < 5.0 | ND < 5.0 | ND < 5.0 | ND < 50 | 1,300 | ND < 500 | ND < 5.0 | ND < 5.0 |
| | 9th Quarterly | 3rd Quarter | 8/9/2004 | 5,600 | 120 | 44 | 302 | 360 | 67 | ND < 5.0 | 13 | ND < 5.0 | ND < 50 | 850 | ND < 500 | ND < 5.0 | ND < 5.0 |
| | 10th Quarterly | 4th Quarter | 11/5/2004 | 58 | 1.0 | ND < 0.5 | ND < 1.5 | ND < 0.5 | 6.7 | ND < 0.5 | 2.8 | ND < 0.5 | ND < 5.0 | 120 | ND < 500 | ND < 0.5 | ND < 0.5 |
| | 11th Quarterly | 1st Quarter | 2/6/2005 | 6,230 | 83.5 | 120 | 602 | 343 | 11.5 | ND < 2.0 | ND < 2.0 | ND < 2.0 | ND < 200 | 729 | 121 | --- | --- |
| | 12th Quarterly | 2nd Quarter | 5/13/2005 | 3,950 | 31.4 | 80.4 | 493 | 193 | ND < 5.0 | ND < 2.5 | ND < 2.5 | ND < 2.5 | ND < 250 | 708 | 106 | --- | --- |
| MW-5 | Well Installation | 2nd Quarter | 5/1/2002 | 63,800 | ND < 150 | 1,270 | 19,500 | 1,720 | ND < 1,000 | ND < 250 | ND < 250 | ND < 250 | ND < 50,000 | 4,420 | 396 | NT | NT |
| | 1st Quarterly | 3rd Quarter | 8/3/2002 | 30,500 | ND < 15 | 486 | 17,700 | 1,760 | ND < 25 | ND < 15 | ND < 15 | ND < 15 | ND < 5,000 | 9,630 | ND < 50 | NT | NT |
| | 2nd Quarterly | 4th Quarter | 11/4/2002 | 81,000 | 789 | ND < 300 | 24,600 | 3,710 | 2,330 | ND < 500 | 1,570 | ND < 500 | ND < 100,000 | 3,870 | ND < 50 | ND < 500 | ND < 500 |
| | 3rd Quarterly | 1st Quarter | 2/5/2003 | 78,000 | 51 | 1,600 | 16,800 | 1,600 | ND < 50 | ND < 50 | ND < 50 | ND < 50 | ND < 500 | ND < 50 | ND < 500 | ND < 50 | ND < 50 |
| | 4th Quarterly | 2nd Quarter | 5/12/2003 | 43,000 | ND < 50 | 790 | 13,400 | 1,200 | ND < 50 | ND < 50 | ND < 50 | ND < 50 | ND < 500 | 4,100 | ND < 500 | ND < 50 | ND < 50 |
| | 5th Quarterly | 3rd Quarter | 8/2/2003 | 17,000 | ND < 50 | 120 | 3,890 | 400 | ND < 50 | ND < 50 | ND < 50 | ND < 50 | ND < 500 | ND < 50 | ND < 500 | ND < 50 | ND < 50 |
| | 6th Quarterly | 4th Quarter | 11/8/2003 | 43,000 | ND < 50 | 760 | 16,100 | 1,500 | ND < 50 | ND < 50 | ND < 50 | ND < 50 | ND < 500 | 4,100 | ND < 500 | ND < 50 | ND < 50 |
| | 7th Quarterly | 1st Quarter | 2/5/2004 | 39,000 | 50 | 1,400 | 22,500 | 2,000 | ND < 50 | ND < 50 | ND < 50 | ND < 50 | ND < 500 | ND < 50 | ND < 500 | ND < 50 | ND < 50 |
| | 8th Quarterly | 2nd Quarter | 5/4/2004 | 54,000 | ND < 50 | 720 | 12,800 | 1,300 | ND < 50 | ND < 50 | ND < 50 | ND < 50 | ND < 500 | 19,000 | ND < 500 | ND < 50 | ND < 50 |
| | 9th Quarterly | 3rd Quarter | 8/9/2004 | 37,000 | ND < 50 | 320 | 10,000 | 1,100 | ND < 50 | ND < 50 | ND < 50 | ND < 50 | ND < 500 | 8,500 | ND < 500 | ND < 50 | ND < 50 |
| | 10th Quarterly | 4th Quarter | 11/5/2004 | 9,800 | ND < 50 | 68 | 1,940 | 170 | ND < 50 | ND < 50 | ND < 50 | ND < 50 | ND < 500 | 890 | ND < 500 | ND < 50 | ND < 50 |
| | 11th Quarterly | 1st Quarter | 2/6/2005 | 13,800 | 5.5 | 174 | 4,090 | 407 | ND < 10 | ND < 5.0 | ND < 5.0 | ND < 5.0 | ND < 500 | 1,650 | 151 | --- | --- |
| | 12th Quarterly | 2nd Quarter | 5/13/2005 | 12,600 | ND < 10 | 197 | 4,050 | 393 | ND < 20 | ND < 10 | ND < 10 | ND < 10 | ND < 1,000 | 1,190 | 113 | --- | --- |
| MW-6 | Well Installation | 2nd Quarter | 5/1/2002 | 3,750 | 845 | 576 | 1,070 | 155 | 980 | ND < 0.5 | 791 | ND < 0.5 | ND < 100 | ND < 50 | ND < 50 | NT | NT |
| | 1st Quarterly | 3rd Quarter | 8/3/2002 | 11,800 | 508 | 62 | 8,630 | 1,640 | 750 | ND < 15 | 300 | ND < 15 | ND < 5,000 | 1,990 | ND < 50 | NT | NT |
| | 2nd Quarterly | 4th Quarter | 11/4/2002 | 9,480 | 535 | 35.2 | 3,420 | 743 | 1,330 | ND < 0.5 | 558 | ND < 0.5 | ND < 50 | 190 | ND < 50 | ND < 0.5 | ND < 0.5 |
| | 3rd Quarterly | 1st Quarter | 2/5/2003 | 4,500 | 20 | ND < 5.0 | 583 | 190 | ND < 5.0 | ND < 5.0 | 17 | ND < 5.0 | ND < 50 | 1,200 | ND < 500 | ND < 5.0 | ND < 5.0 |
| | 4th Quarterly | 2nd Quarter | 5/12/2003 | 2,200 | 22 | 1.2 | 244 | 160 | 68 | ND < 0.5 | 14 | ND < 0.5 | 60 | 280 | ND < 500 | 0.9 | ND < 0.5 |
| | 5th Quarterly | 3rd Quarter | 8/2/2003 | ND < 50 | ND < 0.5 | ND < 0.5 | ND < 1.0 | ND < 0.5 | 1 | ND < 0.5 | ND < 0.5 | ND < 0.5 | ND < 5.0 | ND < 50 | 2,500 | ND < 0.5 | ND < 0.5 |
| | 6th Quarterly | 4th Quarter | 11/8/2003 | ND < 50 | ND < 0.5 | ND < 0.5 | ND < 1.0 | ND < 0.5 | 1.3 | ND < 0.5 | ND < 0.5 | ND < 0.5 | ND < 5.0 | ND < 50 | ND < 500 | ND < 0.5 | ND < 0.5 |
| | 7th Quarterly | 1st Quarter | 2/5/2004 | 110 | 4.2 | ND < 0.5 | ND < 1.0 | ND < 0.5 | 16 | ND < 0.5 | 5.6 | ND < 0.5 | ND < 5.0 | ND < 50 | ND < 500 | ND < 0.5 | ND < 0.5 |
| | 8th Quarterly | 2nd Quarter | 5/4/2004 | 2,200 | 25 | 2.4 | 200.5 | 4.0 | 69 | ND < 0.5 | 17 | ND < 0.5 | 27 | 590 | ND < 500 | ND < 0.5 | ND < 0.5 |
| | 9th Quarterly | 3rd Quarter | 8/9/2004 | 880 | 14 | ND < 5.0 | ND < 15 | ND < 5.0 | 220 | ND < 5.0 | 16 | ND < 5.0 | 280 | 470 | ND < 500 | ND < 5.0 | ND < 5.0 |
| | 10th Quarterly | 4th Quarter | 11/5/2004 | 110 | 3.6 | ND < 0.5 | ND < 1.5 | ND < 0.5 | 16 | ND < 0.5 | 3.2 | ND < 0.5 | ND < 5.0 | 1,000 | ND < 500 | ND < 0.5 | ND < 0.5 |
| | 11th Quarterly | 1st Quarter | 2/6/2005 | ND < 50 | ND < 0.5 | ND < 0.5 | ND < 1.0 | ND < 0.5 | 3.6 | ND < 0.5 | 1.0 | ND < 0.5 | ND < 50 | ND < 50 | 86 | --- | --- |
| | 12th Quarterly | 2nd Quarter | 5/13/2005 | ND < 50 | ND < 0.5 | ND < 0.5 | ND < 1.0 | ND < 0.5 | 2.1 | ND < 0.5 | 0.8 | ND < 0.5 | ND < 50 | ND < 50 | 71 | --- | --- |

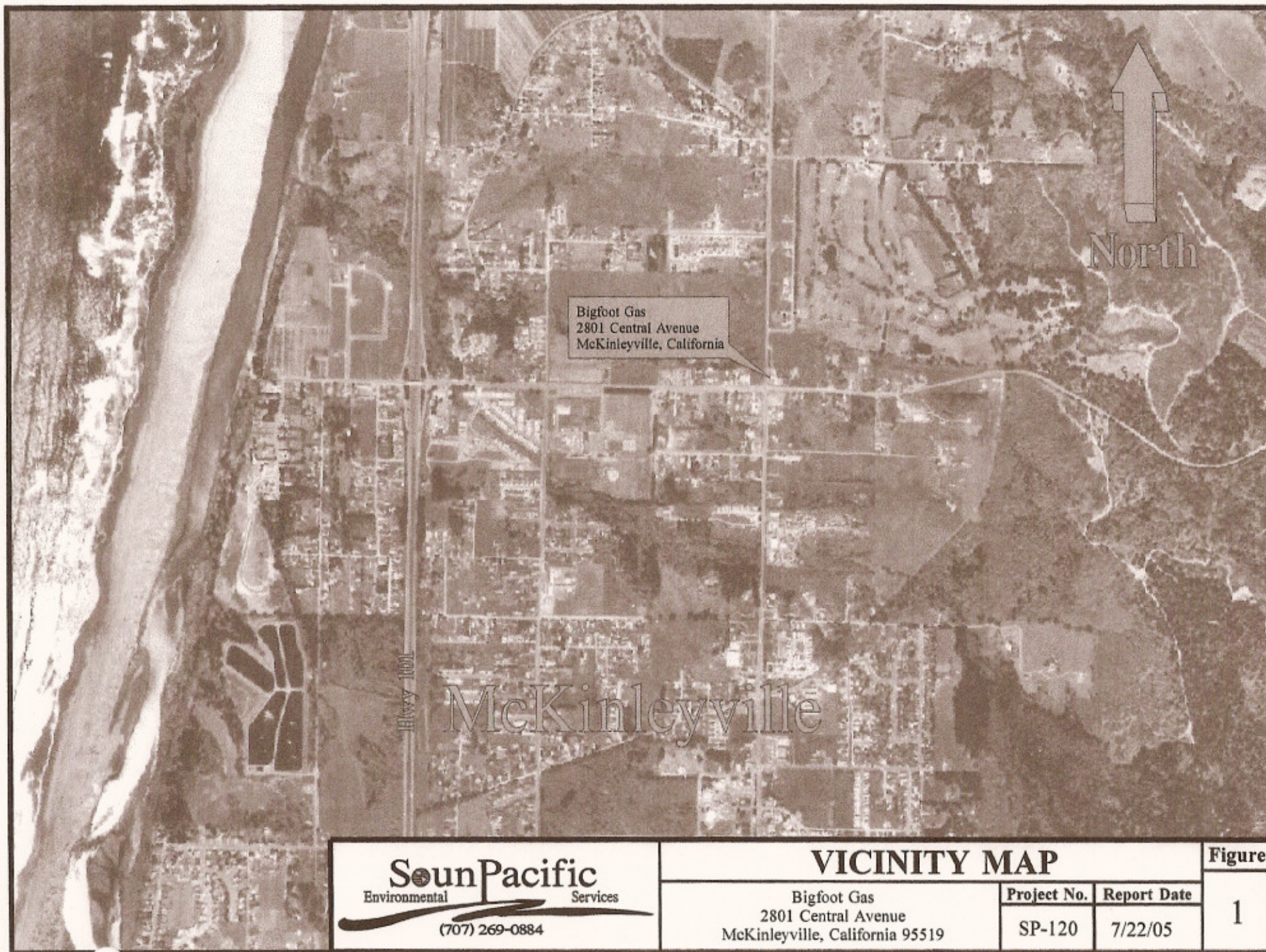
TPHg: Total petroleum hydrocarbons as gasoline
 MTBE: Methyl tertiary butyl ether
 DIPE: Diisopropyl ether
 TAME: Tertiary amyl methyl ether
 TPHd: Total petroleum hydrocarbons as diesel
 NT: Not tested.


TBA: Tertiary butanol
 ETBE: Ethyl tertiary butyl ether
 TPHmo: Total petroleum hydrocarbons as motor oil
 ppb: parts per billion = $\mu\text{g/l} = 0.001 \text{ mg/l} = 0.001 \text{ ppm}$.
 ND: Not detected. Sample was detected at or below the method detection limit as shown.

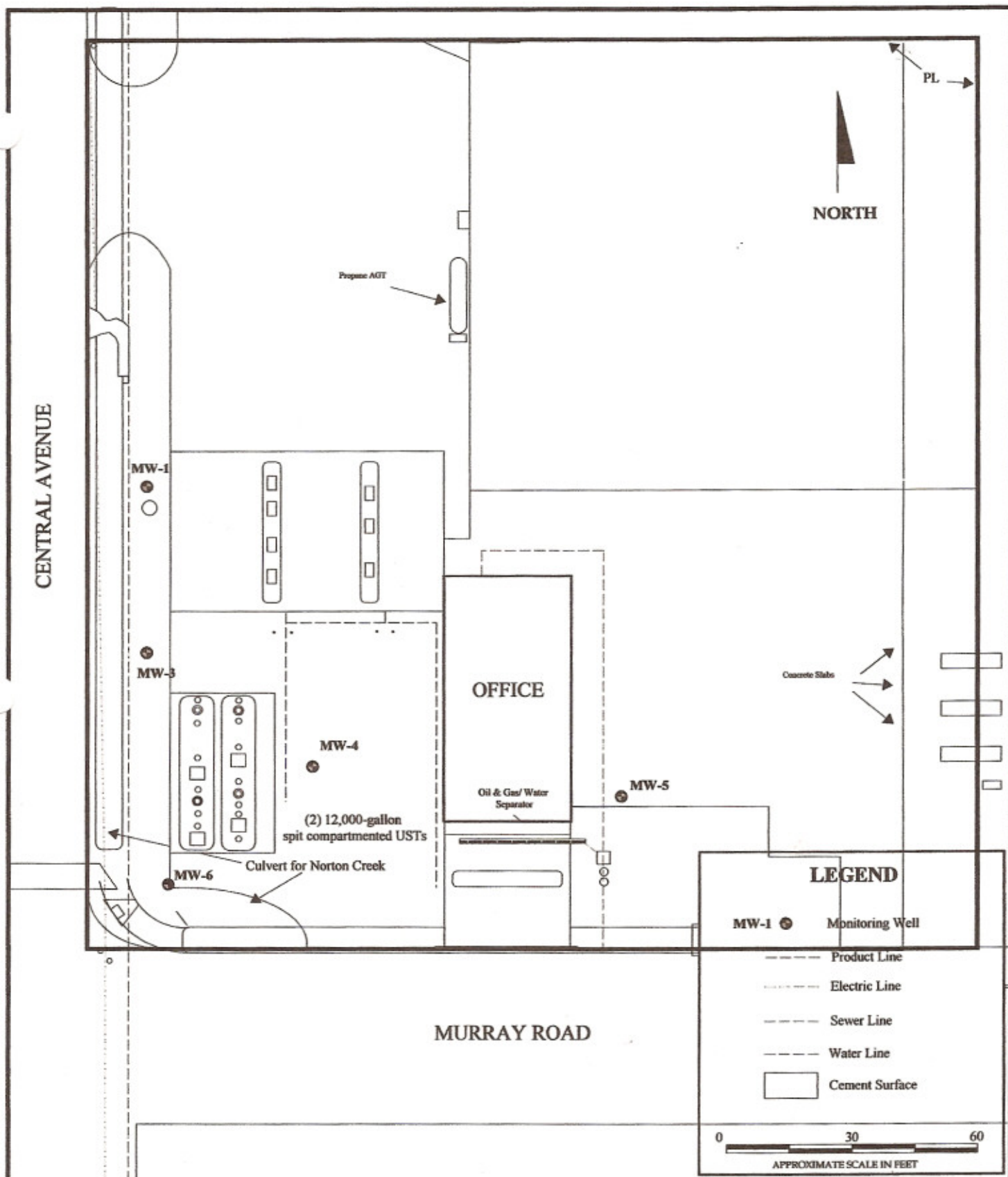
Chart 1
Water Levels
Bigfoot Gas
2801 Central Avenue
McKinleyville, California 95519




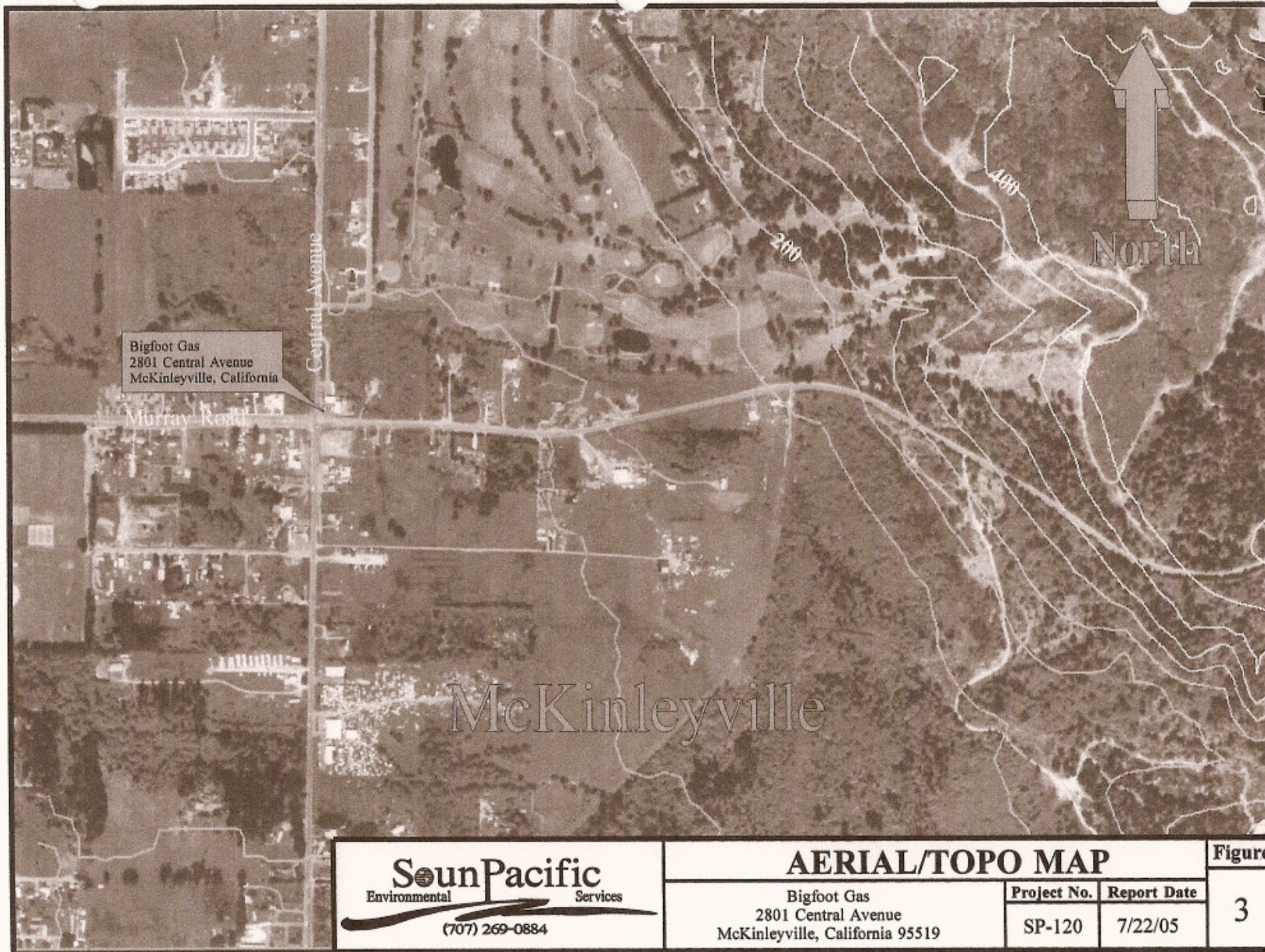
Figures



| | | | |
|--|---|--------------------|--------------------|
|  Soun Pacific Environmental Services (707) 269-0884 | VICINITY MAP | | Figure |
| | Bigfoot Gas 2801 Central Avenue McKinleyville, California 95519 | Project No. | Report Date |
| | | SP-120 | 7/22/05 |
| | | | 1 |



| | | | | |
|--|---|-------------|-------------|--------|
|  <p>Soun Pacific Environmental Services (707) 269-0884</p> | SITE PLAN | | | Figure |
| | Bigfoot Gas 2801 Central Avenue McKinleyville, California 95519 | Project No. | Report Date | 2 |
| | | SP-120 | 7/22/05 | |

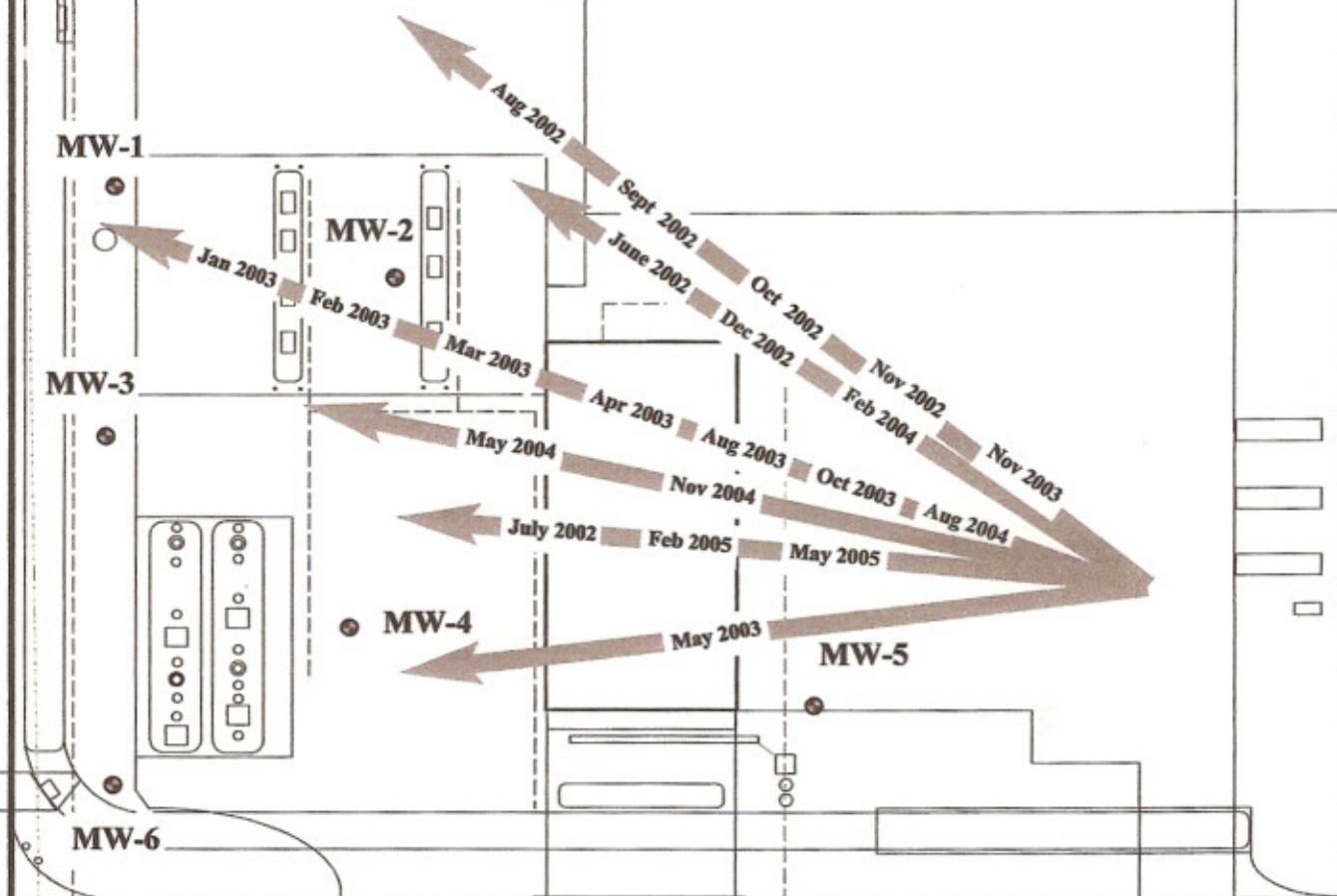


| | | | |
|--|---|---|--------|
| SounPacific Environmental Services (707) 269-0884 | AERIAL/TOPO MAP | | Figure |
| | Bigfoot Gas 2801 Central Avenue McKinleyville, California 95519 | Project No. SP-120 Report Date 7/22/05 | 3 |

CENTRAL AVENUE

NORTH

PL



MURRAY ROAD

LEGEND

MW-1 Monitoring Well



SUMMARY OF GROUNDWATER FLOW DIRECTIONS

Figure

4

SounPacific

Environmental Services

(707) 269-0884

Bigfoot Gas
2801 Central Avenue
McKinleyville, California 95519

Project No.

SP-120



















Report Date

7/22/05

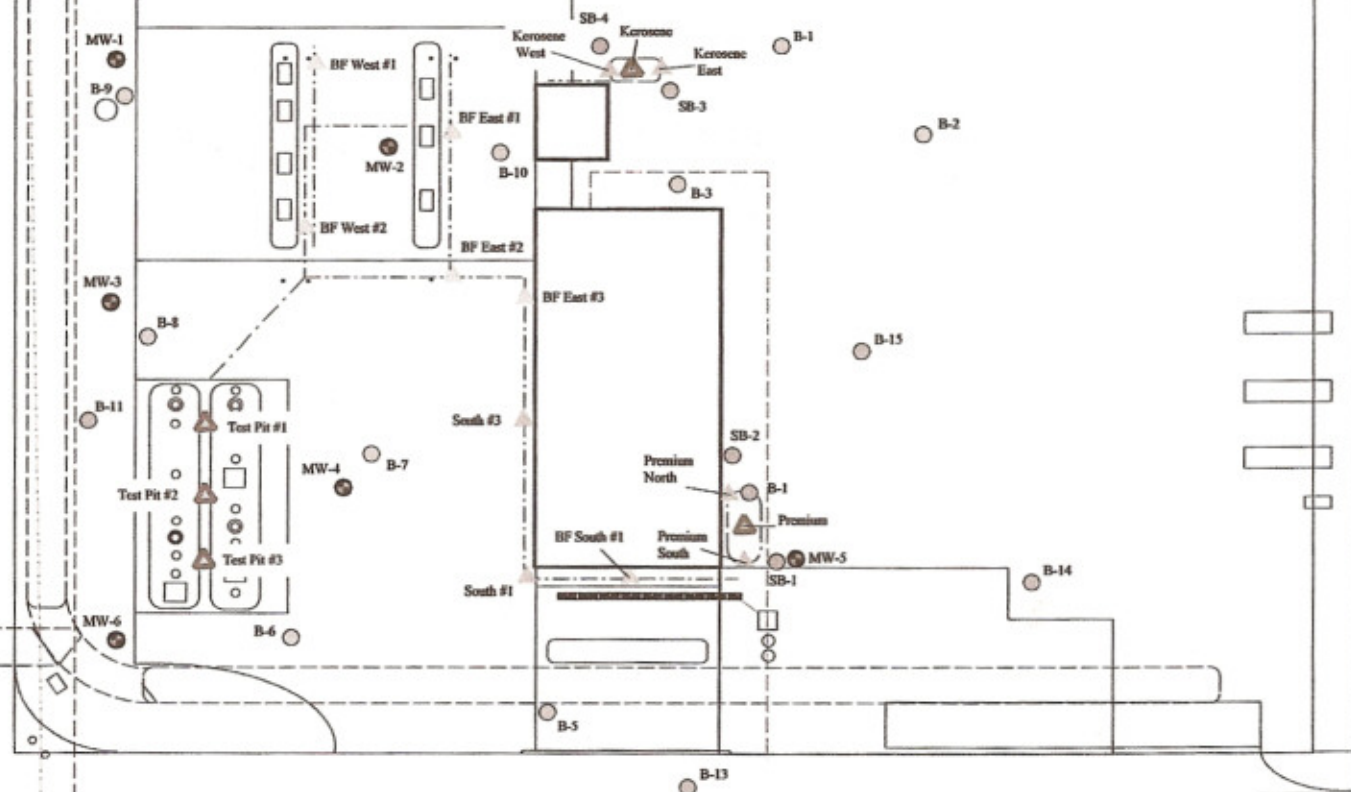
CENTRAL AVENUE

NORTH

LEGEND

-  Removed UST
-  Product Lines
-  BF East #1
-  Test Pit #1
-  South # 1
-  Premium
-  SB-4
-  B-1
-  B-11
-  MW-1
-  Soil Sample (6/91)
-  Groundwater Sample (5/91)
-  Soil Sample (7/91)
-  Groundwater Sample (7/91)
-  Previously Drilled Soil Boring (1995)
-  Previously Drilled Soil Boring (9/00)
-  Previously Drilled Soil Boring (4/02)
-  Existing Monitoring Well

0 30 60
APPROXIMATE SCALE IN FEET



MURRAY ROAD

SounPacific
Environmental Services
(707) 269-0884

PREVIOUS INVESTIGATIONS

Bigfoot Gas
2801 Central Avenue
McKinleyville, California 95519

Project No.

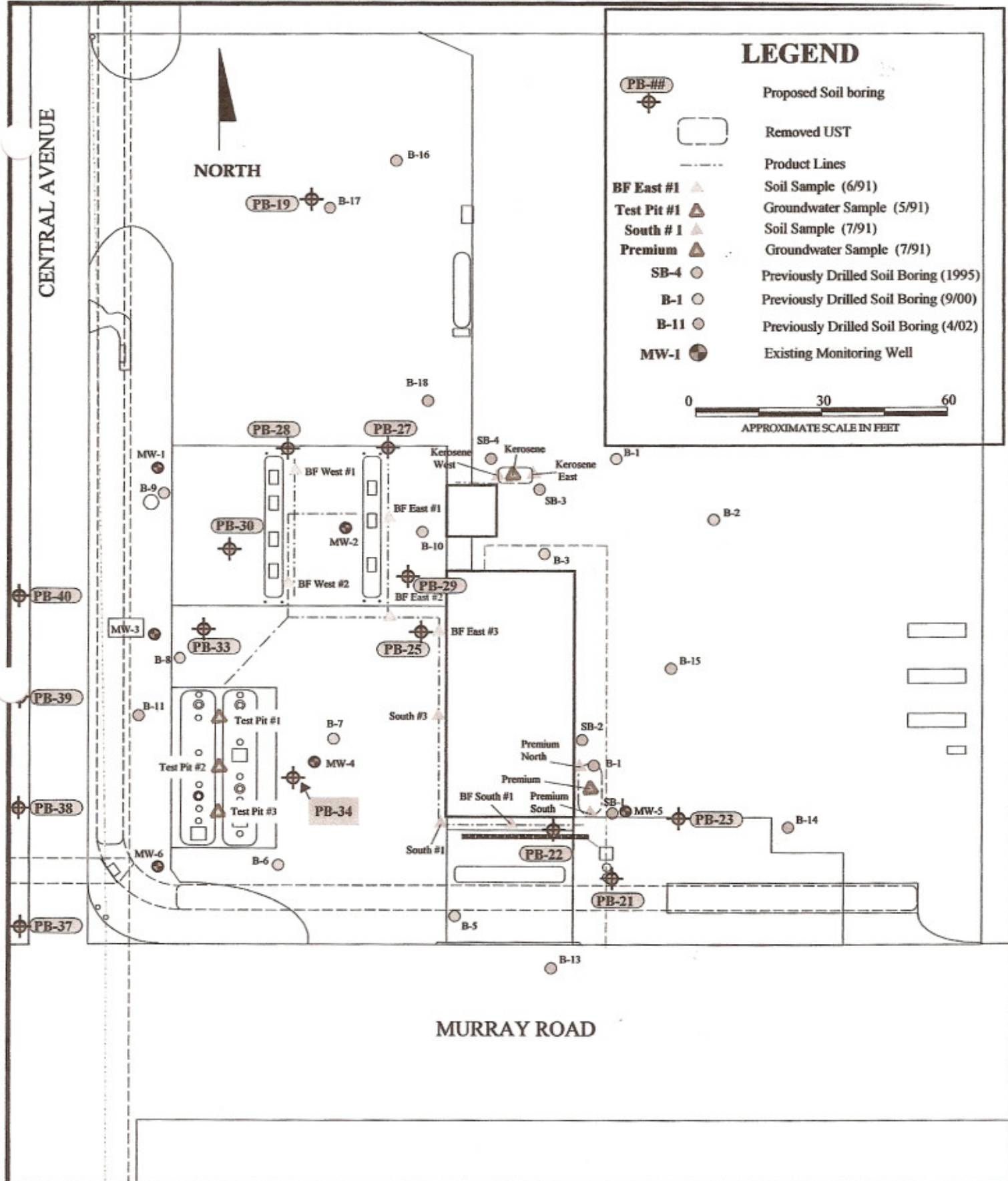
SP-120

Report Date

7/22/05

Figure

5



MURRAY ROAD

PROPOSED INVESTIGATION (Revised)

Bigfoot Gas
2801 Central Avenue
McKinleyville, California 95519

Project No.

SP-120

Report Date

3/18/04












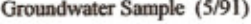
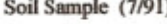
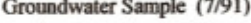
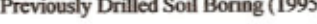
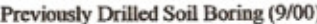


Figure

6

CENTRAL AVENUE

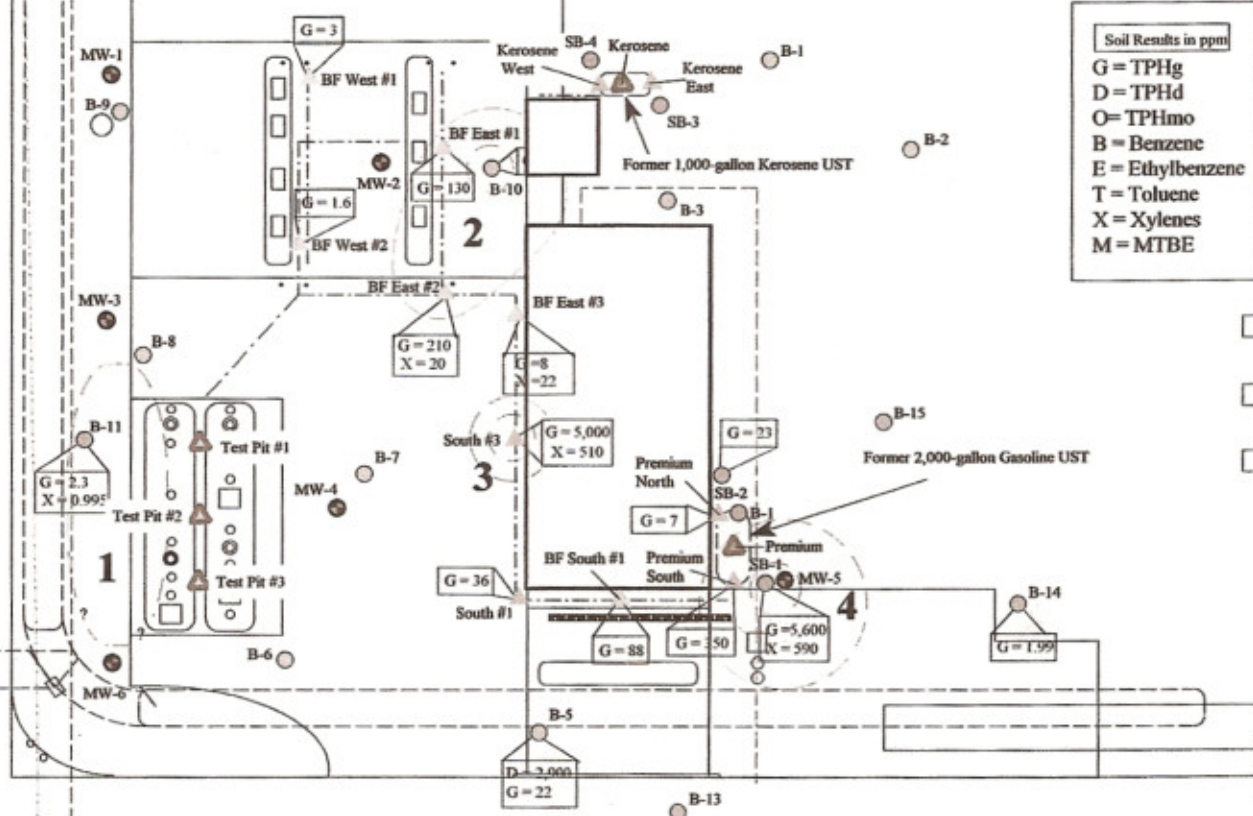
NORTH

LEGEND

-  Estimated Limits of Soil Contamination
-  Product Lines
-  BF East #1
-  Test Pit #1
-  South #1
-  Premium
-  SB-4
-  B-1
-  B-11
-  MW-1
-  Soil Sample (6/91)
-  Groundwater Sample (5/91)
-  Soil Sample (7/91)
-  Groundwater Sample (7/91)
-  Previously Drilled Soil Boring (1995)
-  Previously Drilled Soil Boring (9/00)
-  Previously Drilled Soil Boring (4/02)
-  Existing Monitoring Well

0 30 60
APPROXIMATE SCALE IN FEET

Soil Results in ppm
G = TPHg
D = TPHd
O = TPHmo
B = Benzene
E = Ethylbenzene
T = Toluene
X = Xylenes
M = MTBE



Possible Source Areas

1. Current UST System
2. Product Line East of Eastern Most Dispenser
3. Product Line Adjacent to the West of Office Building
4. End of Product Line near MW-5

PLAN VIEW OF POSSIBLE SOIL CONTAMINATION AND SOURCE AREAS

Figure

7

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Bigfoot Gas
2801 Central Avenue
McKinleyville, California 95519

Project No.
SP-120

Report Date
7/22/05